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AVIATION SAFETY/AIR TRAFFIC CONTROL RESTRICTIONS

HEARING

BEFORE THE

SUBCOMMITTEE ON AVIATION

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

ON

OVERSIGHT OF THE FEDERAL AVIATION ADMINISTRTION AND THE AIR TRAFFIC CONTROL SYSTEM

JUNE 15, 1987

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AVIATION SAFETY/AIR TRAFFIC CONTROL RESTRICTIONS

MONDAY, JUNE 15, 1987

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
SUBCOMMITTEE ON AVIATION,
Washington, DC.

The subcommittee met, pursuant to notice, at 2 p.m. in room SR-253, Russell Senate Office Building, Hon. Wendell Ford (chairman of the subcommittee) presiding.

Staff members assigned to this hearing: Steven Palmer, professional staff member; Harris Livingstain, staff counsel; and Patty Hahn, minority staff counsel.

OPENING STATEMENT BY SENATOR FORD

Senator FORD. The Aviation Subcommittee is holding this hearing to continue its oversight of the Federal Aviation Administration and the air traffic control system.

I am concerned that we have never recovered from the 1981 PATCO strike by air traffic controllers. I am certain that current planned capacity restraints, that is, restrictions of the number of flights that can be in the air at the same time, will ultimately be paid for by the American public.

These restrictions could lead not only to passenger inconveniences but also, to less competitive prices for airline tickets.

The flying public needs the full capacity of our aviation system. The airlines are currently not putting empty airplanes in the sky. They are meeting consumer demands.

It is no surprise that airline industry growth is 23 percent in flights and 46 percent in passenger traffic since the PATCO strike.

Airlines have met the demand, but the air traffic control system has not.

After the PATCO strike, DOT and FAA asked the airlines to stay the course, and stated that the system would be rebuilt in 1983.

The airlines cut back on flights and lost millions. In 1983 DOT and FAA admitted that it was difficult to rebuild the system, and moved their target date to 1984.

Later they suggested to the airlines that the NAS plan would eliminate many problems and that the system could be rebuilt by 1985. 1985 became 1986. And in 1986 it became 1987. And the system is still not rebuilt.

At least DOT and FAA have finally admitted that more personnel are badly needed in the air traffic control system. And I applaud that decision.

It is apparent that the air traffic control system has not kept up with the growth of the airline industry. It seems to me that we are paying the price for five years of neglect.

Given the current state of affairs, I do commend the Secretary for taking the necessary steps to ensure that air travel is as safe as it can be. And I hope to hear more in today's hearing about the current flow proposals to restrain air traffic in 44 air space sectors.

We must know what the effect of the extended flow control will be on safety as well as on airline schedules and flight delays as we attempt to deal with these issues legislatively.

There is a second purpose to this hearing. I believe it is critical that the public know who is in control when it comes to aviation safety. And lately, I've become less certain of the answer to that question as DOT and the FAA seem to be playing catch up.

We are all interested in the same outcome when it comes to safety. We all want to ensure that Congress and others do not micromanage the FAA.

But it is absolutely essential in my opinion that the DOT, the FAA, the National Transportation Safety Board, the Congress, and airlines and aviation users all be on the same wave length, with the same understanding, with regard to these critical safety and other issues.

I am delighted that Senator Kassebaum is here with us this afternoon. And Senator, if you have any statement, I would entertain it at this time.

OPENING STATEMENT BY SENATOR KASSEBAUM

Senator KASSEBAUM. Thank you, Mr. Chairman. I really do not have anything to say except that I think this is an important hearing, as they all seem to be when they deal with aviation issues, and I am happy you requested it.

I appreciate Mr. Burnley coming on rather short notice, because of your concern and mine as well, and obviously the Department's, about the condition of the air traffic control system and the FAA's recent announcement.

It was just a couple of weeks ago, when DOT said that Mr. Burnett's statements as chairman of the National Transportation Safety Board were alarmist. However, now the decision has been made by the Department of Transportation to impose further flow control measures, which some believe will lead to significant reductions in numbers of flights. We look forward to hearing your comments on what you think lies ahead.

I would support the Chairman's concern about making sure that the right hand and left hand are indeed working together. Because I think our role is to try to understand the impact of changes in the flow control system rather than to make alarmist criticisms. However, I continue to wonder about the Transportation Department's planning capability.

While we've been assured that there were adequate air traffic controllers, the Chairman added a thousand in the legislation that

we recently reported. The Department called for 900-and-some more.

It would be easier for us to exercise our oversight responsibility if we had a better understanding of the reasons for these shifts in policy.

Again, I am appreciative of your coming today to testify, Mr. Burnley.

Senator FORD. Thank you, Nancy.

I have a statement Senator Hollings would like to have included in the record.

[The statement follows:]

OPENING STATEMENT BY THE CHAIRMAN

Mr. Chairman, today marks the fourth day of hearings since January on aviation safety. This hearing, however, is unique. For the first time, the Department of Transportation comes before us to explain why after months and months of ignoring the facts, they are now ready to accept reality.

In previous hearings before this Committee, DOT witnesses have time and again testified that safety margins are not diminishing. Now in an apparent reversal, they are slowing the rate of peak-hour traffic flow through congested airspace, even if it means creating additional delays. I, for one, think an explanation is due for this recent about face.

On May 28th, this subcommittee held a hearing to determine whether statements made by NTSB Chairman Burnett, urging restrictions on summer flight schedules, would be appropriate to increase our margins of safety. The FAA made declaration upon declaration that such action would not be necessary. They asserted that the skies are safer than ever before and that the air traffic control system has the capacity to handle the traffic.

However, controller errors and reports of near-collisions involving airliners have continued. Since this hearing, there have been reports of many near mid-air collisions. The numbers are adding up, and the laws of probability will catch up to us if we continue to ignore the reality of the situation. And the reality is that a problem exists.

Last week, Secretary Dole announced that due to the current and expected levels of congestion, and its direct effect upon safety margins, ground delays will be imposed, airline speeds reduced, and traffic rerouted in order to reduce this congestion. I welcome this announcement, but I believe it has been long overdue.

The position taken by the Secretary on this matter, and the decision to hire an additional 955 controllers, confirms our suspicions that our skies are not as safe as they once were—or more importantly, as they should be. Additionally, it is an indication that we should once again consider the recommendation of Chairman Burnett as a painful, yet necessary course of action.

I want to thank Senator Ford for the timely manner in which he has brought this issue into the forefront. Aviation safety is a concern which has gripped this nation, and an issue which deserves constant attention.

Senator FORD. Mr. Burnley, if you have a statement, we would be glad to hear that, and then we will get to the questions.

You might recognize those who have accompanied you.

STATEMENT OF JIM BURNLEY, DEPUTY SECRETARY, DEPARTMENT OF TRANSPORTATION, ACCOMPANIED BY KEITH POTTS, ASSOCIATE ADMINISTRATOR OF FAA FOR AIR TRAFFIC; NORBERT OWENS, DEPUTY ASSOCIATE ADMINISTRATOR OF FAA; AND JOHN RYAN, DIRECTOR OF AIR TRAFFIC OPERATIONS SERVICE

Mr. BURNLEY. Yes, sir, thank you Mr. Chairman, and thank you, Senator Kassebaum.

I am happy to have an opportunity to appear before the subcommittee today to address the issues of air traffic flow restrictions,

controller staffing, and aviation consumer complaints. There is some confusion among the public on these issues, and I appreciate this forum to lay out the facts.

With me today, Mr. Chairman, are Keith Potts, sitting to my immediate right, the Associate Administrator of the FAA for air traffic; his deputy sitting to my immediate left, Mr. Norbert Owens; and at the end of the table on my left, the Director of Air Traffic Operations Service John Ryan.

This and the other oversight hearings you have held on the air traffic control system and aviation safety demonstrate the depth of commitment of this committee to ensuring the safety and efficiency of the nation's aviation system.

The aviation industry has grown more rapidly than anyone could have predicted at the time of airline deregulation, with domestic passenger travel up more than 50 percent since 1978.

Yet I think it is very important to continue to note at every such hearing as this that each category of aviation has demonstrated an improved safety record during this period.

Handling this dynamic growth is a challenging task, and we applaud this committee's vigilant role.

Two weeks ago, the FAA extended flow control procedures from being used to address airport capacity problems to also address congestion in air space sectors. The new program was made possible by a technological innovation known as the Aircraft Situation Display.

On May 4, the FAA asked its 20 en route air traffic control sectors to identify all sectors, or blocks of air space, that have the potential to reach capacity before the end of this summer.

Now, as Don Engen, the FAA Administrator, testified before you on May 28, the FAA was in the process on that date, "of seeking to validate the information received concerning those sectors".

And he said:

> With our Aircraft Situation Display, we are going to have the capability to monitor the workload in designated sectors. Our traffic management specialist will reroute aircraft around affected sectors, or may delay departures destined for sectors approaching those levels we feel are capacity restricted.

This initiative was also described in Administrator Engen's May 27 response to the National Transportation Safety Board just a day before that hearing.

Now, all of the en route centers reported back by early June. And of the 652 sectors, 125 were identified as having the potential capacity problems. FAA is using flow control to maintain acceptable levels of traffic, so that capacity in individual sectors is not exceeded.

More than 30 sectors are involved so far. In some cases, flights will be held on the ground. The system also permits rerouting traffic away from saturated sectors, and reducing aircraft speeds to smooth out the ripples in traffic flow.

This allows the FAA to dynamically restrict traffic based on actual conditions where the situation merits, rather than arbitrarily reducing the number of flights.

While this leads to more delays in some circumstances, the safety of the system is more important than expediting traffic.

Last week the FAA also proposed a rule to revise requirements for aircraft operations in the congested airspace surrounding busy airports. These airspaces, called terminal control areas, or TCA's, have been established around 23 major airports.

The proposed rule will require that mode C, that is, altitude reporting transponder equipment, be used on any flight within 30 miles of each TCA primary airport, regardless of whether the aircraft's altitude would place it within the TCA itself.

As you know, the FAA has previously acted to require that aircraft actually inside these TCA's have such equipment by next December 1, and this would extend it to 30 miles out from the TCA.

It would also restrict flights by student pilots through the TCA. Student pilots would be required to receive specialized ground and flight training in the particular TCA in which they want to fly.

Also, the FAA plans to standardize the dimensions and configuration of the TCA's, in order to make the airspace regulations easier to understand by pilots.

The proposed new TCA design would be proposed of three concentric circles of 10 mile, 20 mile, and 30 mile radii from the primary airport in the TCA.

Finally, last week's announcement requests general aviation and other nonscheduled pilots planning to fly under instrument flight rules above 23,000 to file IFR flight plans 4 hours ahead of departure.

This will assist FAA in determining sector demand at the earliest possible moment.

You've also asked me to address the level of controllers, supervisors, and support personnel sought in the President's budget.

For fiscal year 1988 the Department requested a 20-percent increase in FAA funding over fiscal year 1987 levels. Even though Federal spending on domestic programs must be reduced to bring down the deficit, the Reagan Administration and Secretary Dole will not economize on safety.

And on top of the 20-percent increase, as I testified before this subcommittee on March 26, quoting that testimony, Secretary Dole has repeatedly told Admiral Engen he will get as many additional controllers as he believes he needs.

This is the case now as it was in September 1984; September 1985; and last January, when we announced increases in our requests for funds for the air traffic control workforce.

While we had originally planned to reach 15,225 air traffic controllers and air traffic assistants by September 30, 1988, we now anticipate reaching 15,225 at the end of this fiscal year, a year ahead of that schedule.

Mr. Chairman, budgeting relies on estimates and projections, of course. And the Administration's original request for 15,225 controller workforce by the end of fiscal year 1988 was based on the best information and projections available last summer and fall.

While we have been criticized in the past for overestimating future air traffic activity and growth, and thus, overestimating controller workload, certainly that was not the case for our original projections for fiscal year 1988.

And instead of those original projections of last year of a 3- to 4-percent growth for the fiscal year that starts next October 1, the

FAA now believes that it will be prudent to assume that we will see traffic growth in the 5- to 6-percent range.

This change in projections, plus other steps that we're taking to enhance air traffic safety, such as creation of additional Airport Radar Service Areas, and the creation of 20 new sectors in our en-route centers over the next two years, means we will need additional controllers and crucial support personnel beginning in fiscal year 1988.

Hence, we proposed a budget amendment on June 3, adding 955 people to FAA's previous request for personnel next year.

The next point is very, very important. This number, the 955, includes 580 additional controllers, for a total of 15,805 controllers and air traffic assistants by September 30, 1988.

Equally as important as the controller workforce increase, as Administrator Engen has testified repeatedly, is the addition of on-site support staff to manage the system. And we are requesting in our amendment the addition of 375 such support staff.

This includes supervisors, technical support personnel, and traffic management coordinators.

Now the latter category, traffic management coordinators, are people who work in the centers and towers, and by monitoring the operation of the system, help improve the flow of traffic, thereby enhancing safety and reducing delays.

One other highlight of our amendment is the expansion, to at least two additional centers, of the radar training program for controllers, which has been successful at the Chicago center.

This program utilizes a computer capability of the FAA Academy to simulate the actual sectors at designated centers, and thereby accelerates the process of qualifying developmental controllers with site-specific training scenarios.

The total of 955 controller, supervisory, and support positions results from the assessment undertaken by the FAA over the past 3 months.

Our requested increase is not the final answer, nor should it be viewed as an attempt to quiet the critics who complain of delays on an overburdened system.

This request does not, and cannot, affect the system this summer. It seeks to meet demand we see developing over the next few years.

We will continue to review these numbers, and will not hesitate to propose any adjustments to them that future events show to be necessary.

And I should also point out that the FAA is undertaking a reassessment of its air traffic staffing standards to be sure that they fully meet our planning needs in the future.

Mr. Chairman, I was amazed that at least one of our recent critics reacted to our request for additional personnel by charging that it was conclusive evidence of FAA "mismanagement;" those were the words that were used.

Just the opposite is true. Aviation in the U.S. is in a period of rapid change, I think we would all agree. And good management principles, as well as practical necessity, dictate that the FAA continuously review and update its projections.

When needs change, FAA's budget request should be changed, regardless of whether such changes fit precisely within the usual timetable for administration and Congressional consideration of annual budget submissions.

Let me emphasize one other point. The right way to set controller staffing goals is by analysis of the actual traffic demands the system is facing, and is projected to face, in the future, and by application of technical staffing standards for all of the necessary personnel: controllers, supervisors, and technical support personnel.

Arbitrary, statutory targets can inadvertently distort traffic management in ways that eventually impede the FAA's ability to handle traffic as safely and as efficiently as possible.

One example is statutorily requiring a particular FPL or full performance level percentage of the controller population. If an FPL is promoted to supervisory status, or a technical position in support of traffic management, he or she is no longer counted as an FPL.

Therefore, statutory language requiring a certain percentage of FPLs systemwide and per facility, can put pressure on the FAA to delay promotions of staff to supervisory positions; restrict movement between facilities; and limit new hires to avoid increasing the base of those eligible to be FPLs.

Thus, facility managers may face the pressures of choosing between meeting a statutory mandate, or best managing the air traffic control system.

I hope members of the committee will join us in a common effort to obtain the personnel increases we have requested, while resisting efforts to inappropriately limit the FAA's managerial flexibility.

I would like to turn now briefly from the FAA air traffic control activities to the area of airline-consumer issues, about which there has also been a great deal of recent interest and activity.

As you know, airline consumer complaints have risen dramatically during the past year. These complaints cover a broad range of issues, from scheduling to fares to lost baggage, and flight delays are a major cause of consumer dissatisfaction.

At 22 of the busiest airports, there were 367,000 delays reported by the FAA in 1986, compared to 295,000 in 1985, or a 25 percent increase.

While an estimated 65 to 70 percent of these delays were weather related, we found that at a number of the airports, the airlines were scheduling more operations at peak hours than the facilities could handle in a timely manner, even in good weather.

Thus, Secretary Dole announced in January the beginning of a series of formal investigations covering airline scheduling practices.

Also, the Department proposed that the airlines hold discussions to smooth out their schedules at airports, where the carriers have more operations during certain hours than the facilities could accommodate.

Now, as a result of the scheduling discussions, the major airlines at five airports, Newark, Philadelphia, O'Hare, Atlanta, and Dallas-Fort Worth, made adjustments which we believe will eliminate many delays which travelers would otherwise have suffered this summer.

Other actions have also been taken to reduce delays, such as the expanded East Coast plan, which reduced delays at airports in the New York area by nearly 41 percent during the first three months of operation early this year.

However, while we are continuously looking for ways to reduce delays, I want to emphasize again that the FAA's new flow control procedures will trigger additional delays as and when necessary to maximize safety.

I am sure every member of this subcommittee would agree that where there are tradeoffs, safety considerations must always prevail over a desire to reduce delays.

The Department also has other effective tools with which to protect the aviation consumer. Section 411 of the FAA act allows for investigation of air carriers and ticket agents if there is a reasonable suspicion of unfair or deceptive practices, or unfair methods of competition in the promotion or sale of air transportation.

The Department announced just last Friday a settlement between our enforcement office and Continental Airlines regarding violations of the Federal Aviation Act, including section 411, and DOT's consumer protection regulations.

The violations were related to refunds, compensation, and disclosure of code-sharing arrangements to consumers. The settlement provides for the payment of a civil penalty of $250,000, and orders Continental to cease and desist from future violations.

It also outlines many steps Continental is taking or has agreed to take to reduce its consumer problems including, among others, $60 million in capital improvement for state of the art baggage systems; increasing the size of its consumer relations department from 57 to 150 people; and retraining the current employees.

Now, our experience to date indicates that consumer complaints, whether delay caused or centering on some other area, appear to be primarily related to a shaking out of the industry in the wake of airline mergers and acquisitions.

During the past year, almost 70 percent of the industry was involved in consolidation activities of one sort or the other. While steady improvement could be reasonably expected to follow, and a period of stability after operations have been integrated, we still believe action is necessary.

Indeed, the May 14 letter from many members of this committee emphasized the continuing need for such action.

Secretary Dole has sent letters to the carriers, reminding them of DOT consumer rules and policies, and of DOT's enforcement responsibilities. She has established a consumer task force to investigate complaints and meet with airline management.

And the Department is investigating so-called economic flight cancellations.

Most recently, the Department issued a notice of proposed rulemaking requesting public comment on carrier scheduling practices, and the need for disclosure of airline service quality and performance information.

The NPRM discusses the problems of scheduling and delays, and then sets out possible regulatory solutions, including adoption of a disclosure rule, a performance standard, or new computerized reservation system rules.

It also asks for comment on nonregulatory solutions, including legislative changes that would permit the use of peak load pricing to allocate limited runway space at busy airports.

The Department has also specifically requested public comment on how the proposed disclosure and enforcement opportunities might affect the safety of airline operations, and how such adverse affects could be avoided.

No one wants to put pressure on airline employees to fly planes that may need maintenance work because doing such work may make the airlines' delay record look worse. Thus, we believe we must proceed with great caution in this area.

We expect that the combination of initiatives already underway will bring steady improvement in airline service available to consumers, while preserving safety and efficiency.

This completes my prepared statement, Mr. Chairman. And I and the gentlemen with me will be happy to respond to any question.

Senator FORD. Thank you, Mr. Burnley.

I might announce that my and Senator Kassebaum's legislation which related to delays and was scheduled for a markup tomorrow, has been postponed.

I think your imposition of the new flow control situation might create more delays, and I think you have already admitted it would do that. It is my understanding that at least one-sixteenth of all the delays will be created by this; is that correct; about 1,000 out of 16,000 system-wide delays will be created by Flow Control?

Mr. BURNLEY. Mr. Chairman, the number is going to vary dramatically from day to day. If I might, let me have Keith Potts, our Associate Administrator for Air Traffic, comment specifically on what our experience has been in the first two weeks.

Mr. POTTS. Thank you.

Senator FORD. Excuse me, 16,000 operations a day with 1,000 delays, so that is of the 16,000 operations per day there are approximately 1,000 delays and with your new flow control restrictions that will increase anywhere from 150 to 200 a day.

Mr. POTTS. That is correct. We are running approximately 1,067 or 1,087 delays per day on an average, and the new system will probably average about 200 additional delays per day.

Senator FORD. That makes about 1,200, then?

Mr. POTTS. That makes about 1,200; but I might point out that, for example, the last three days that really has not proven to be exactly correct. Last Friday we did 108,000 plus operations, which is about 3-percent above what we considered to be a typical Friday, and we had 1,536 delays that day, which was a little bit higher than what we are talking about here.

On Saturday, we had 104 percent of our traffic and on Sunday about 107 percent. On Saturday we had only 951 delays, and on Sunday we had only 318. So it depends a lot on the actual demand and the weather and equipment outages and those kinds of things.

You are correct. The new program will add about 200 delays per day. That is what it has been running.

Senator FORD. Therefore, you can expect that one out of every 16 airplanes will be subject to a delay. Is that correct?

Mr. BURNLEY. That is roughly correct, Mr. Chairman, although I think it is fair to say that this marginal increase that Mr. Potts just testified to is at the margin. It is 200.

Senator FORD. We are on hot and should be running on cool; is that it?

Mr. BURNLEY. No, but we were at about 1,100 as he said, and this will bump that number up somewhat.

Senator FORD. Let me establish something here, Mr. Secretary. How much authority do you exercise in your position at the Department of Transportation?

That is not very funny for this Senator. You can laugh if you want to, but I want to know what authority you exercise in your position?

Mr. BURNLEY. I laugh because some days it is more than others.

Senator FORD. Well, give me a day where there is more.

Mr. BURNLEY. All right. When the Secretary delegates particular matters to me, then I have authority in those; and other days I am in the chain of command where, in matters that have to reach her level, I will be the last reviewing authority perhaps before it goes to her desk.

Senator FORD. Whether she gets it or not, therefore, is up to you?

Mr. BURNLEY. Typically not, Mr. Chairman. In fact, my practice is that the only time things are not sent to her desk is because of something that I am having a problem with where we need more information. I am not in the habit of blocking things from going to her desk. To the contrary, I try to make sure she sees quite a flow of paper.

Senator FORD. You are here today speaking for the Secretary?

Mr. BURNLEY. I am.

I would emphasize on the other hand that——

Senator FORD. I am just trying to establish this for the record, and I hope you understand that.

Mr. BURNLEY. Yes, sir; but let me, if I may, emphasize that one reason I brought these three gentlemen with me today is that neither the Secretary nor I attempt to exercise day-to-day control over the air traffic control system. These are the people, along with the Administrator and the Deputy Administrator, who are responsible for that activity on a day-to-day basis.

When policy issues are raised, budget amendments like the one that we sent up very recently, then obviously we are involved in those.

Senator FORD. We will talk about the 955 in a little bit and attitude you had a couple of weeks ago about hiring more controllers. Prior to that we will get to the bill that would add 1,000, and of course we will talk about the new controller union which sees the need of 3,000 more. We will get into that a little bit later.

Mr. Burnley, at this Subcommittee's hearing on May 28 to examine the National Transportation Safety Board's recommendations that flight restrictions be imposed, Administrator Engen stated that, if needed, the FAA would restrict traffic. He also said that such a move was not necessary.

Mr. Burnley, why, then, less than 1 week later did DOT announce its effort to use flow control to restrict flights through congested air space sectors?

Mr. BURNLEY. Mr. Chairman, I am going to take, if I may, a moment to answer that question because it is a very important question.

Senator FORD. We have all afternoon, and you are the only witness. Senator Kassebaum and I have lots of time, so we will get into some nitty gritty before the afternoon is over. You might even have to take a break.

Mr. BURNLEY. All right, sir. Good. Let us start now if we may.

Anticipating that this might be an issue, I brought with me the transcript of your hearing on May 28. Let me call your attention if I may specifically, Mr. Chairman, beginning on page 23, to what the Administrator did say on that occasion.

Quoting from the Administrator before this Subcommittee on May 28:

> Now, earlier this month we asked all of our domestic air traffic control centers to provide information concerning those air traffic control sectors which are of concern now or had the potential to be of concern this summer. That effort resulted in about 100 en route sectors out of 652 being identified.
>
> We are now analyzing and seeking to validate the information received concerning those sectors. With our aircraft situation display, we are going to have the capability to monitor workload in designated sectors. This monitoring will enable tactical and strategic solutions to sector capacity problems and real time.
>
> Our traffic management specialists will reroute aircraft around affected sectors or may delay departures destined for sectors approaching those levels which we feel are capacity restricted.

In short, Mr. Chairman—I am still quoting Mr. Engen on May 28—"our flow control"——

Senator FORD. I have read his testimony.

Mr. BURNLEY. Well, sir, I think it is very important the record be complete.

> Our flow control provides us with the capability to monitor traffic levels and to make dynamic decisions to deal with potentially excessive traffic levels. It does not work perfectly but recent improvements have given us added ability to deal more effectively with peak traffic periods.

Now, Mr. Chairman, this went on throughout the hearing.

Senator FORD. That was on pages 4 and 5 of his testimony which I have read; is that correct?

Mr. BURNLEY. In his prepared testimony, and it is on pages 23 and 24 of the transcript.

Now, on page 29 in answer to a question you asked him, he said the following:

> First of all, Mr. Chairman, I want to assure you that we reduce air traffic today on a daily basis. As you and I are sitting here, sir, we are reducing the flow of air traffic.

You asked him how are you reducing that, and he said through central flow control, and he went on to describe exactly how that works.

There are several other passages, I think, where he went into great detail. As an example, I will call your attention to the next reference. Beginning on page 50 of that transcript, there is a discussion of the GAO and NTSB's most recent recommendations, and he makes the point again on page 51.

> My point, sir, is we are doing that today. We will reduce as necessary. If anybody quoted me as saying we are not going to reduce, that is not really what I said or how I said it.

Then at the end of the hearing, if I could call your attention to the closing remarks of Senator Kasten, the Senator pointed out:

> It seems to me you are saying that you agree there is a problem, that we are going to restrict aircraft flow this summer. The question is how and when, and it is a matter of degree, and I applaud your testimony in that way because I agree with you that we are going to have to restrict aircraft air traffic flow this summer, and we do not want to do it in an unnecessary, slipshod kind of way.

So, Mr. Chairman, I think the record of the hearing is very, very clear that Administrator Engen said in detail and repeatedly that he intended to do just that on last Thursday in a press briefing we announced we were in fact doing.

Senator FORD. Let me just say, Mr. Burnley, that hearing that you are referring to where Administrator Engen testified and you quoted from that was on the congestion of airports, and I do not think we were getting into airspace at the time of that hearing.

Mr. BURNLEY. Certainly, sir, I suspect that just going through these numerous references I have just given you, that the Admiral was certainly thinking and meant to communicate——

Senator FORD. I was here during the whole hearing, if you recall.

Mr. BURNLEY. He certainly meant to communicate that he was talking about the entire system.

Senator FORD. All right. Let me ask you this, then. As I understand it, flow control operates Monday through Friday but not on Saturday and Sunday; is that correct?

Mr. POTTS. No, sir. It operates 24 hours a day, 7 days a week.

Senator FORD. Twenty-four hours a day, 7 days a week. All right, sir. I just wanted to get that as a matter of record because there is some false impressions out there that it only operates 5 days and not on Saturday and Sunday.

So you are assuring me that it works 24 hours a day, 7 days a week?

Mr. POTTS. That is correct, sir.

Senator FORD. All right.

Mr. BURNLEY. Mr. Chairman, if I might, that is an important point. If Mr. Potts could take that one level of detail further for us, so there is no misunderstanding about what it means to say "it operates." There is a difference between monitoring and restricting, and he might elaborate on that.

Mr. POTTS. OK, thank you. The central flow facility here in headquarters that I think you are referring to is a unit, as I said, that does operate 24 hours a day, 7 days a week. It operates all the time.

In addition to that, we have traffic management units in the en route traffic control centers in certain of our busiest towers which also operate all the time.

There is also another aspect of flow control that is accomplished by the first line supervisor and the air traffic controllers at the position of operation. No IFR aircraft get in the air unless we issue a clearance to that airplane, and we take only those that can be safely handled regardless of any other procedures that might be in effect or might be argued here or elsewhere.

So we are monitoring the system all the time, 24 hours a day, both in the central flow and in the centers and in the busy towers.

Senator FORD. Mr. Burnley, would it be fair to say that these changes were made in recognition of a reduced margin of air safety and that the air traffic control system is clearly strained?

Mr. BURNLEY. Mr. Chairman, I do not agree that that would be quite fair.

Senator FORD. It is almost fair, then. If it is not quite fair, it is almost. You should watch your words, I am going to lean on your words like you lean on mine today.

So "not quite", however you want to use it.

Mr. BURNLEY. I would say that I think it is fair to say, that we have obviously taken a number of steps recently and will continue to take steps. These are not the last announcements, I am sure, that you will hear from the Department or the FAA on air traffic issues in the months and years to come. We have, as I said in my prepared statement, a very dynamic situation.

We think that we are staying abreast of it. We think that in fact we may be gaining on it a little bit. The NAS Plan is now yielding, as you know, concrete results in terms of delivery of equipment to the field in substantial ways, like the new host computers that are going in right now.

So I think that there is no reason to suggest or imply that the margin of safety has in any way been eroded.

On the other hand, Mr. Chairman, I do think it is fair to say that with the growth that we are experiencing, there is a continued challenge there, and we have to scramble to keep up with it. That is one of the reasons why you have seen the kind of 20-percent increase we have asked for for fiscal year 1988.

Senator FORD. How much of that 20 percent was additional money out of the Airport & Airway Trust Fund? How much from the trust fund did you increase the amount?

Mr. BURNLEY. Mr. Chairman, I do not recall the numbers. We have tried, as you know, to maximize the percentage of cost recovery out of the Trust Fund, but we are inhibited, as you also know, by the 1982 penalty provision as to how much we can get out, based upon AIP appropriations.

It is a 20-percent increase in real dollars, however, over the dollars that were appropriated for us for fiscal year 1987.

Senator FORD. You were pushing very hard to get most of the money for FAA operations out of the trust fund and not out of the general fund, as I recall. You increased it from like 50 to 85 percent for FAA.

Mr. BURNLEY. Yes, sir. We do believe overall that 85 percent of the costs are run up by nongovernmental users and should be paid out of the Trust Fund. That is a position, as you know, of long standing.

Senator FORD. It has taken you 5 years to arrive at that decision.

Mr. BURNLEY. No, sir. I beg to disagree. We have asked for 85 percent Trust Fund financing for 5 of the last 6 years.

Senator FORD. Well, I have the budget here, and I can understand it. It has every one of the last five Presidential budget requests for the FAA. So if you want to talk about figures and how much you have been requesting, I am willing to talk about those, and I am willing to meet you toe to toe, eye to eye on this. You are

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a pretty good talker; but I hope that when we lay the facts down, that will somehow or other limit your ability to converse.

Mr. BURNLEY. Senator, you were talking, if I understood you, about the percentage of cost recovery, and on that the 85 percent has been a standard——

Senator FORD. But you have not been after that until now.

Let me ask you another question, then. I think you have had a sudden turnaround, and I think it is clear that you have had a sudden turnaround because in January you surely could have anticipated increase in air travel.

But given the sudden turnaround that has been made both with respect to restricting flights and our own controllers, I remember very well that when we were discussing the legislation and asking that we passed out of this Committee which Senator Kassebaum and I worked so hard on, the reauthorization of the trust fund, time after time we were told that we did not need the additional controllers. So I go back to all of that.

With respect to the flights and the controllers, what does this say for the level of communications between DOT and Congress as well as, even, between FAA and DOT?

Mr. BURNLEY. Mr. Chairman, if I may again call the subcommittee's attention to the record, I think it would be useful on this point. In fact, Admiral Engen had testified along with Mr. Potts and Mr. William Hendricks, the Director of Aviation Safety at the FAA, before this subcommittee on January 29, 1987.

In the course of that testimony, he said:

> The figure 15,225 for 1988 represents our best judgment. That number will handle the traffic in the years 1989 and 1990. That is a fair assessment, sir. As each year goes by and we look at the traffic count, I would like to have the opportunity to continually upgrade that for 1989 and 1990 if necessary.

You said then:

> So it would be your judgment if you are falling behind that you would accelerate the request based on the growth, whether we have looked in the crystal ball and found the right number, if we miss that number and it is growing at a greater rate that you would want to have the latitude in order to increase that number.

Now, again, Senator, as I said in my opening statement, as to the credit of the FAA and given the rate of change that we are seeing in traffic growth and changed conditions, we are not doing these reviews once a year and that, in fact, you have had a midyear review.

I am sure that Mr. Potts and Mr. Ryan can go into a good deal of detail about what went into that review because it was a substantial exercise for them.

I think it important to make sure, therefore, that there is no misunderstanding or misapprehension on the part of this subcommittee as to the level of communications. As the Admiral said on January 29, and you agreed, Mr. Chairman, you have to keep looking at it, you have to keep revising, you have to keep updating.

That is exactly what we have done, and I would hope that the subcommittee would applaud that exercise on a continuing basis. As I said before, we will be back. I am quite sure this is not the last time that we are going to upgrade and revise our projections.

Senator FORD. Let me ask one more question, and then I will turn it over to Senator Kassebaum.

It is my understanding that it will be the first line supervisors at the en route centers who will decide if air space sectors become overcrowded and flights should be restricted.

What criteria has been established for these individuals to use and have the airlines been made aware of them?

Mr. POTTS. Senator Ford, the first line supervisor is responsible for the minute-by-minute operation of the positions of operation that he supervises. He is not only supervising the people but also the flows of traffic.

There are really no established criteria but it is a complicated training process that he goes through to be able to recognize the abilities of all of his controllers that are working in front of him. There is a great difference in the ability of individual controllers to handle numbers of airplanes, just like all people have different aptitudes for different things.

That supervisor is responsible to monitor that at all times——

Senator FORD. Let me ask you a question before you go any further. I thought they were trained for 3D operations. I read that in the paper the other day, and the academy was quoted for that. They all basically ought to be trained at the same level then, should they not?

Mr. POTTS. They certainly are.

Senator FORD. You are saying some are capable and some are not?

Mr. POTTS. I did not say some are not capable. I said some are more capable than others in terms of handling numbers of airplanes.

Senator FORD. Do you have a minimum when you go out there to request information, a minimum that you could trust or lean on?

Mr. POTTS. We do not set a minimum number of airplanes for any controller to handle because that also depends on the complexity of the sector——

Senator FORD. What I am trying to do is establish a criteria, though. You have people out there you have to depend on. Mr. Burnley just said that he was not in the day-to-day operation of various departments within the Department of Transportation, nor was Secretary Dole. So if you are going to lean on somebody out there to give you the information, they should have at least a minimum requirement, should they not, so you could be safe and at least feel confident in the information that is being given to you?

Mr. POTTS. Again, we do not set a precise number like five or six because it depends, again, on the complexity of the traffic that is being worked by the controller. If they are all straight and level flights, there is no problem at all in a controller working a great number of airplanes.

In my 27 years of experience, I worked 40 airplanes on a frequency at the same time, and that was a very simple sector where there was no changing of routes or altitudes and all you do is just sit and monitor them as opposed to a low altitude sector where you are running instrument approach procedures at airports at three or four different locations where you must know all the approach altitudes and those kinds of things. You can handle an awful lot less airplanes and do it safely.

So what I am saying to you is, again, each individual supervisor knows his people. He knows their ability, and a lot of what we do depends on how that team can handle the traffic.

Basically, you are correct. We would expect them to handle a certain amount of traffic. We would expect them to provide service. We are a service organization, but that supervisor is responsible to make sure they do not handle too many.

Again, airplanes do not get in the air unless we clear them, so there is a decision made on a minute-by-minute basis.

Now, we go on from there, and we have traffic management units and flow controllers in the facility and our central flow here in Washington who help each of those sectors maintain the flow of traffic between the sectors. That is vertical and lateral as well as——

Senator FORD. Mr. Potts, I think we understand the organization of the FAA. We have been out to the FAA building. We have watched the flights on the computers—America waking up in the morning as the planes begin on the East Coast and work to the West Coast. We have been through all of that.

What I asked you was have you had an established criteria which the controllers can use to restrict flights? You just said that they have different abilities, but it seems to me that you either have to lean on somebody out there or you have a standard for them to go by when they declare a space is overcrowded. How do they do that?

I understand the weather, and I understand maybe two airplanes being in the same place, same time, which of course "cannot" be allowed to happen. But what is the criteria that the agency has established? What is the standard for that supervisor out there? You gave me the nomenclature of the FAA. I know that, but what does the supervisor base his decision on?

Mr. POTTS. Well, as I said, in the day-to-day, minute-to-minute operation, I gave you the correct answer.

Now, talking about the sector establishment itself, we do have guidelines, orders and procedures for determining how many sectors we need and how and when they should be divided and combined or whatever. We will be glad to provide those procedures for the record. I do not have them here with me, but there is a criteria that we use to determine the number of sectors. I did not understand your question.

[The information referred to follows:]

ORDER

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7210.46

3/ 16/84

SUBJ ESTABLISHMENT AND VALIDATION OF EN ROUTE SECTORS

1. PURPOSE. This order provides standardized criteria for the purpose of establishing, and validating domestic en route sectors at the 20 CONUS ARTCC's.

2. DISTRIBUTION. This order is distributed to selected offices in Washington and Regional Headquarters, Mike Monroney Aeronautical Center, the FAA Technical Center, and all Air Traffic Field Offices.

3. BACKGROUND.

a. The National Resectorization Program was implemented to optimize ARTCC sectorization, improve system design, and increase controller productivity.

b. With the increasing emphasis on prudent management of fiscal resources, it is important that we maintain positive procedures for the establishing, and validation, of en route sectors. This order provides those procedures for facility, regional, and Headquarters personnel.

c. This order sets the standard for examining the operational necessity of a proposed sector. It is intended to work independently of, yet in conjunction with, the normal Facility and Equipment (F&E) and operations budgetary planning requirements.

d. Regional and facility personnel should budget for additional staffing required to operate proposed new sectors in their operations submission. When the proposed new sector requires additional equipment, or equipment modifications, an F&E submission will also be required.

e. Each regional air traffic division (ATD) manager was briefed by AAT-300 on the retention of up to 10 sectors (but not to exceed the pre-strike total authorization) at each facility even though the resectorization results in a reduction of sector operations. The intent was to ensure that all ARTCC's would have the equipment capability to respond to changes. If additional equipment will be required beyond the present available sector equipment, facilities should allow ample time for normal F&E budget cycles.

4. PROCEDURES.

a. The procedure for validation of a sector is a combined analysis of traffic volume, complexity, and human analysis. There is no clear-cut formula that will cover every situation; however, proven guidelines have been established and can be used to assist in the validation of a sector.

Example: If the average low altitude sector density for all the facility's domestic low altitude sectors is 5.80, then any new sector configuration should be at least 4.93.

Example: If the average high altitude sector density for all the facility's domestic high altitude sectors is 8.20, then any new sector configuration should be at least 7.38.

(3) Calculate a sector complexity factor for the proposed sector.

(a) Using the flight progress strips for the peak traffic hour of the 90-percentile day, Houston Busy Day, the Fort Worth ARTCC's Aviation Program, or other traffic data which was used in the sector density calculation, assign the appropriate point value for each aircraft as follows (see complexity workload worksheet Appendix 3):

Complexity Workload Formula

1 Functions		Points
(aa)	Departures	5
(bb)	Arrivals	4
(cc)	En Route requiring control function	4
(dd)	Emergency	4
(ee)	Special flights	3
(ff)	En Route (no control function)	2
(gg)	Coordination (additional point/s when above function/s require coordination)	1

2 An en route aircraft is classified as an aircraft that originates outside and passes through the sector without landing.

3 An en route aircraft operating at an altitude which will transit approach control airspace and is handed-off to the approach control, then back to the same sector, is counted as an en route (2 points) and a coordination (1 point) factor.

4 A "pop-up" (airfile) en route is counted as a departure (5 points) and 1 point for each coordination function necessary.

5 A "pop-up" or special VFR arrival is counted as an arrival (4 points) and 1 point for each coordination function necessary.

6 Special flights (7110.65, Chapter 7) are counted as an additional 3 points, e.g., departure complexity points plus special flight points and 1 point for each coordination function necessary.

7 Arrivals that are radar vectored to final approach add an additional (2 points).

(b) The normal range of an average en route sector should have a complexity workload factor of at least 90.

5. Approval Process.

a. Facility and regional personnel shall:

(1) Establish a work group to develop a complete staff study concerning the problem. This staff study shall include a detailed description of all steps taken, including all alternative sector plans which were considered.

(2) Prepare a cost analysis of the final proposal.

(3) Forward the completed staff study package to the regional ATD manager for review.

b. Regional ATD managers shall make the final regional decision. If the ATD manager concurs, the package should be forwarded to the Procedures Division (AAT-300) for headquarters review.

c. AAT-300 shall:

(1) Review the package and verify the plan conforms to national objectives and policy.

(2) Complete headquarters coordination.

d. Final approval by AAT-1.

6. Annual Review Process.

a. Each ARTCC shall perform an annual review of all sectors within their center, using procedures outlined in paragraph 4d.

b. Each ARTCC shall submit to AAT-300 through the appropriate regional offices a list of sectors by density values with the lowest density on the bottom. Written justification shall be provided for all sectors which have a density value which is less than 70% of the average density for all the sectors.

c. If these low density sectors are found to be non-justifiable by the procedures prescribed in this order, the ARTCC should:

(1) Reconfigure the sector so that it is a justifiable sector.

(2) Show operational justification to qualify as a part-time sector.

(3) Fully explain the configuration limitations which require retaining the sector.

(4) Eliminate the sector.

APPENDIX 1. SECTOR DENSITY CRITERIA

Sector density is determined by averaging the number of aircraft traversing a specific sector for a specific period of time. An example of computing the density would be counting the number of aircraft in a sector once every minute. At the end of a given hour the "average sector density" for the hour could be determined.

As it would be impracticable to manually count aircraft in a sector every minute, an automated method for determining sector density should be employed. Data concerning sector flight times and aircraft in a specific sector can be derived from the "Houston Busy Day" readout or any other appropriate program.

Consider an even flow across a sector of 60 aircraft per hour, or one aircraft per minute. The time needed for a given aircraft to completely traverse the sector, or sector flight time, is 10 minutes. Logically, for a given 10-minute period there would be 10 aircraft in the sector. Sector density can thus be computed by multiplying the average sector flight time (in minutes) for a specific sector times its peak hour count. Once that figure is reached, it is divided by 60 minutes. The resulting figure will be the sector density.

EXAMPLE:

average sector flight time = 15 minutes

peak hour traffic count = 36 aircraft

$\frac{15 \times 36}{60} = \frac{540}{60} = 9.0$ average traffic density

APPENDIX 2. PRINCIPLES OF SECTORIZATION

The "Principles of Sectorization", originally stated in AAT-1's letter of October 28, 1981, are as follows:

- Since the size and function of sectors are generally dictated by four basic factors, i.e., traffic volume, communications/radar limitation, procedural complexity, and terrain, sectors should be designed so that no more than two of the subject factors are inherent in the sectors' operation. Traffic volume is the variable that can be modified to compensate for the presence of more than one of the other factors.

- Multiple conflict points involving major traffic flows should be avoided. Conflict points should not be located so near the boundary of a sector as to create excessive coordination when action to separate individual aircraft is required.

- Sectors should whenever possible have no more than two major functions--en route and arrivals or en route and departures.

- Sectors should be wide enough/long enough to accommodate sector functions and allow for radar vector separation techniques, RNAV offset procedures, and established holding pattern protected airspace, without requiring coordination with other sectors/facilities.

- Sector design should be whenever practicable compatible with the DARC (single site) coverage scheme in order to facilitate transition to the backup system.

- Sectors within an area of specialization should align with major traffic flows and each area of specialization should contain a mix of both high and low altitude sectors. Areas of specialization should contain a minimum of six sectors.

- Automation represents a significant consideration in the optimization of sector design. Both the capabilities as well as the limitations of the system must be considered in designing airspace. The construction of sectors must be done so as to make maximum use of the various capabilities of the computer, i.e., efficient strip utilization, effective automatic HO functions, conflict alert, etc. However, careful consideration must be given the design of airspace, and the supporting procedures, to ensure operational and procedural problems are not created due to computer limitations.

APPENDIX 3. COMPLEXITY WORKLOAD WORKSHEET

I FUNCTIONS	Number of Functions	Point Value	Total Points
A. DEPARTURES			
B. ARRIVALS			
C. RADAR VECTORED ARRIVALS			
D. EN ROUTE (requiring control functions)			
E. EN ROUTE (no control function)			
F. EMERGENCY			
G. SPECIAL FLIGHTS (7110.65. CHAPTER 7)			
H. COORDINATION (additional points when above functions require coordination)			
			TOTALS

Senator FORD. Let me just add something. I will read from the GAO's testimony, Mr. Burnley, so it will be verbatim:

> In addition to flow control, FAA says it looks to its traffic management coordinators, supervisors and controllers to make judgments on how much traffic can be safely handled. But, when GAO surveyed the en route Chicago center, its traffic management unit was staffed with only four fulltime coordinators instead of FAA's goal of 21. The Chicago tower did not have a traffic management unit at all.

Let me read to you,

> In our 1985 survey, supervisors at the Chicago center told us that they typically spent 60 percent of their time working traffic, and over 60 percent of them said that this hindered their ability to coordinate air space and perform other procedural or operational matters.

This the kicker:

> Half of them also said they did not believe that they had sufficient say in determining the volume and complexity of traffic the controllers they supervise were expected to handle.

Now, apparently there is a feeling out there that if they do not have sufficient operational control or sufficient ability in determining the volume, somebody has set out there for them under which to operate. That is what I am trying to get at.

Mr. POTTS. With reference to the statement about the four TMUs, I think that the record would show there are actually seven staff, and the 21 they are talking about was a proposed staffing standard. It was not a standard that was in effect at that time.

Senator FORD. Why would you propose a number without it being something that you need?

Mr. POTTS. Because at that time we were doing what Mr. Burnley told you earlier. We were evaluating the need for the expansion of the flow control program. Also at that time, we did not have a traffic management unit at O'Hare because we had not done that before. We were in the process of establishing that.

Senator FORD. I found Mr. McLure and those who joined him at our last hearing to be fair, down to earth and, I thought, accurate. I thought they had done an excellent job.

So we have a lot of different thoughts here. One is saying how great they are, and the other one is saying you have problems.

I will turn it over to Senator Kassebaum at this time and let her ask some questions, and I have several more.

Senator KASSEBAUM. Thank you, Mr. Chairman.

Let me just say that first, I have been a firm believer that if there are too many planes flying for the system's ability to handle, they should be restricted. So I applaud the FAA's efforts to monitor traffic increases, but what I would like to explore with you a moment is the operation of the floor control system itself, particularly the relation between the sectors and the towers during peak traffic periods. I wonder also about system staffing levels and whether it is a question of not having the numbers of controllers needed or whether flights are spread out as efficiently as they could be.

Now, there are now 125 sectors. How do the current staffing levels of those sectors compare with the staffing levels prior to the strike in 1981?

Mr. BURNLEY. If I may, Senator Kassebaum, let me ask Jack Ryan to answer that question.

Mr. RYAN. Senator Kassebaum, as I understand the question, it is what is the staffing now at those 125 sectors vis-a-vis before the strike?

Senator KASSEBAUM. The staffing levels prior to the strike.

Mr. RYAN. I am not even sure that some of those sectors existed before the strike, and it is something we would have to do some research on, each individual one, to find out what the staffing standard calls for now as opposed to what it called for before the strike.

Before the strike we had about 721 en route sectors in our 20 centers, and now we have 652. So that will take a little staff work.

Senator KASSEBAUM. But would you not need at least the same number of controllers, and full performance level controllers? Wouldn't you therefore need more controllers than the current number?

Mr. RYAN. I would say overall the staffing now vis-a-vis before the strike is less according to our staffing standard, by virtue of the fact that we have about 69 or 70 sectors less now than we did then. That is across the total 20 centers in the United States.

Senator KASSEBAUM. Yes, Mr. Potts.

Mr. POTTS. If I might, Senator, there would be the same number of people working in each sector today as there was before the strike. I think we answered in overall staffing in the facility, but if we have a sector that is in operation, there is a radar person there, and there is a manual person there, and there is a supervisor person there, and sometimes there are others to help it.

So if your question is for each individual sector do the same number of people work there, the answer is yes.

Senator KASSEBAUM. But they are covering, of course, a much larger sector?

Mr. POTTS. They are covering different air space. In some cases it might be a simpler air space. In other words, in a high altitude area it may be just one airway as opposed to two airways.

Senator KASSEBAUM. How do current staffing levels compare to the levels in the towers prior to the strike?

Mr. POTTS. The staffing level in the tower would apply the same way. If we have a position of operation that must be staffed, there will be the right number of people working there; however, we have reduced the total numbers, and we probably do not operate the same number of sectors as we did. In other words, we combine some; or when the traffic dictates we decombine them and we put extra people in to work, or people that are on detail doing something else.

Senator KASSEBAUM. For the record I have about five parts of some very exact questions on staffing numbers that I would like for the record, regarding the full performance level of controller staffing at each of the facilities.

[The following information was subsequently received for the record:]

QUESTION OF SENATOR KASSEBAUM AND THE ANSWER

Question. What is the manpower level in all air traffic control enroute centers by the following categories:

A. Total employment in each facility in FY 78, FY81, and by each month in FY84, FY85, FY86 and FY 87 thru June 1, 1987.

B. Total full performance level controller staffing in each facility during the exact same time period above.

C. Facility staffing requirements, by position, in each facility during exact same time period above.

D. Percentage of time supervisory personnel work both air traffic and supervise staff.

E. Number of supervisory and FPL controllers eligible for retirement at beginning of each fiscal year from 1984. Number of retirements actually processed, by category, during FY 84, FY 85 and by month in FY 86 thru June 87 and projected retirements for next 24 months in each category.

F. Total overtime, by facility and position, during the exact time period in item A.

BALANCE OF FPL STAFFING BETWEEN ENROUTE AND TERMINAL FACILITIES

Answer. As clarified by staff, the issue raised for response is what the staffing levels at enroute and terminal facilities would indicate over time (1978-1987) concerning whether the FAA has the opportunity to shift FPL-qualified personnel from one type of facility to another to ease airline delays.

For the following reasons, a direct comparison of 1981 or earlier (pre-strike) controller staffing levels with current staffing would be misleading and therefore has not been attempted. First, before the strike, FAA staff for the "105th percentile busy day" and now it staffs for the "90th percentile busy" day. This anticipates a moderate reliance on overtime rather than having many controllers just waiting to work when it gets busiest. Second, FAA has increased controller time on position from about four hours per shift before the strike to almost five and one-half hours. Third, it was decided after the strike that non-control positions could be manned by lower graded employees (Air Traffic Assistants) in order to achieve higher levels of productivity from controller personnel. For these reasons, percentage changes in controller staffing over time cannot be relied on for analytical purposes.

As of June 30, 1987, there were 6,145 operational air traffic controllers assigned to air traffic control towers. Of these, 5,746 (94 percent) were full performance level controllers (FPL). However, one-third of the operational controllers are not required to be certified on radar, and thus a significantly shorter period of training is required for these individuals to reach FPL status. In the enroute centers, there were 5,052 operational controllers, of whom 3,871 (77 percent) were FPL's. Operational controllers are those who are certified on two or more positions of operation.

Three observations may be made about the seeming imbalance of FPL's between terminals and centers. First, once the "non-radar-trained" third of terminal FPL's are removed from the total 94% level at towers, the "radar trained" FPL percentage is lower than at the centers. Second, the simplest course of shifting "radar trained" FPL's to centers would sharply impact staffing at the towers yet be masked by the high overall FPL level that includes the one-third non-radar qualified personnel.

Third, the transition from being a terminal non-radar controller to a radar controller in a center is oftentimes not practical. There are substantial differences between the knowledge and skills associated with non-radar air traffic control work in a terminal environment and what is required in the center radar environment. Additionally, it should be noted that, even with regard to radar-qualified controllers, there are distinctions between methods, procedures, and equipment used in the center environment for radar control versus the terminal environment. Consequently, terminal radar controllers would have to receive training and certification in the center environment which is generally time consuming and costly, even for those who are succcessful in making the transition.

Senator FORD. May I ask a question at this time, please?

I am just looking at the FPLs, your 1987 authorized level and what is actually there and what GAO said was there. There seems to be some confusion.

According to the report Chicago, for instance, was authorized 394 personnel and has received 185 as of January 31, 1987 by one group, and another group said they had received 118. There is discrepancy all over the block, and even if the two groups are right as to the staffing they are still 200-plus members authorized in 1987 short in that one area, and you can just go down through the whole GAO report and see where they are short.

Mr. BURNLEY. Mr. Chairman, if I might comment, and I would like Jack Ryan perhaps to comment specifically on Chicago, which I think is what you are looking at.

Senator FORD. I have all of them. Pick another one if you would like.

Mr. BURNLEY. I think that was the one you were reading. Administrator Engen has sent a detailed letter and analysis of that report to the GAO because it is the FAA's belief that the report is both confusing and inaccurate in a number of very important respects.

I think Jack Ryan is best equipped among those of us who are here at the table to talk about specific examples if you want to go into those. I think it would be very useful, though, if we may, to submit Administrator Engen's written response to that report for the record [1] so that the Subcommittee has the advantage of that information.

Mr. RYAN. Senator, at Chicago center the end of May 1987.

Senator FORD. Try January 31.

Mr. RYAN. I am sorry, we do not have January 31.

Senator FORD. Well, give me the latest. That will be all right unless you jacked it up.

Mr. RYAN. The allocation for Chicago center is 301 controllers.

Senator FORD. That is down 94 since January 1?

Mr. RYAN. I do not have the January 1 numbers.

Senator FORD. Your 1987 authorized level at Chicago was 394.

Mr. BURNLEY. Could you give me a page reference?

Senator FORD. Page 12.

And your personnel management group said on January 31 there was 185 and GAO said there was 118.

We will let you do that for the record, Jack, unless you have got the figures on it. There is just such a discrepancy among the groups that are responsible. And I have a tendency to kind of lean toward GAO.

Mr. BURNLEY. Again, I think both the detailed Engen response that has already been sent to the GAO would be very useful, and we will be happy to answer specific questions on specific facilities.

[The material referred to follows:]

EXPLANATION OF GAO MAY 1987 DATA ON "1987 FPL CONTROLLER STAFFING"

FAA'S CHICAGO EN ROUTE CENTER (AS OF FEBRUARY 1987)

The data discussed appear in Table 3.2 of the General Accounting Office's (GAO) May 1987 report entitled "FAA Staffing—Air Traffic Controllers' Work Load and Operational Performance."

Table 3.2 is entitled "1987 FPL Controller Staffing." However, Column I of the table lists end-of-year goals or "position authorizations" that are intended to represent the FAA's target for all controllers, including trainees, and air traffic assistants it seeks to have allocated to each designated facility by September 30, 1987. This combination of personnel have been designated the "controller workforce." In fact, because GAO only counted controllers at the GS–11 and above, its total of 394 differs from the FAA's total allocation to the Chicago Center of 426, including controller trainees. More important, because "FPL" or "Full Performance Level" controllers are only a subset of the controller workforce, the figures in Column I cannot be usefully compared with the numbers of FPL controllers at any particular facility.

Turning to Columns II and III, the GAO and FAA totals for FPL's at the Chicago Center vary only in small degree. Under the PMIS centralized method of counting

[1] The letter was not reproducible.

FPL controllers, the GAO counted 185 FPL controllers while FAA counted 188. As for the "on board" FPL count shown in Column III, the GAO counted 118 and the FAA counted 123. The GAO purportedly used information supplied by the facilities, but the FAA numbers were telephoned in by each facility and show actual FPL-qualified and certified controllers on February 28.

Senator KASSEBAUM. It is my understanding that in general staffing levels have been higher at the towers than at the centers.

I wonder if, as you analyze the needs across the country, there has been any thought to offering incentives to get people to move within the system so that you do not have too many in one place and not enough in another.

It seems to me several years ago there was talk about offering salary incentives to encourage controllers to move to areas of need. Has this policy been implemented or have you given any thought to implementing it?

Mr. POTTS. We did have a program that we called the cross-option program that you might be thinking about, where we did offer the terminal controller an opportunity to move from the terminal to the en route on a promotion basis, where we authorized a program that we called the promotion on the go, which means as soon as the person volunteered to go from the terminal to the en route we gave them a promotion according to the grade they were at.

In other words, if they were a 13 at the terminal and they were going to a GS-14 center, we gave that promotion. And we did gain roughly about 100, I think it was. Actually, it was 99 people that were in that program, and they have successfully checked out and became operational controllers or full performance levels in the centers.

Senator KASSEBAUM. Are you still——

Mr. POTTS. Yes, we still have the program. But because of "PCS" travel money, it has not developed as rapidly as we would like to see it.

Mr. MCCLURE. Because of what?

Mr. POTTS. "Permanent Change of Station Money," in other words money to help the employee in his relocation expenses, paying real estate commissions and those kinds of things. Those moves are costing us an average of about $28,000 apiece now.

So we cannot just move them, you know, without due consideration. But we would encourage that program and we still are.

Senator KASSEBAUM. Well, I would think the program would allow you to attract and retain a greater number of qualified personnel, and that it as well, particularly if it would mean fewer delayed flights.

Mr. BURNLEY. Senator, if I might comment on the problem Mr. Potts has alluded to, as you know, the 1987 supplemental package is before Congress now.

And one reason that we find that the FAA has kind of an on-again, off-again situation on programs like cross-option is that our appropriations committees have, in each of the past five years except 1987 funded us a little tightly on the operations account, never mind whether it comes out of the trust fund or general revenues. When that has happened or our appropriation is otherwise a little bit below what we require to cover things like pay increases

and that sort of thing, inevitably we are back during the fiscal year seeking a supplemental appropriation.

So here we are two-thirds of the way through this fiscal year and the FAA folks are awaiting, as we all are, completion of action on the supplemental. And it just creates difficulties in keeping a program like this moving, because we cannot just move the money around from account to account freely.

Senator KASSEBAUM. So would it not be fair to say that OMB has had a large role to play in determining exactly who gets funded and what the fundings levels will be?

Mr. BURNLEY. They have. But I must say, OMB has not been the culprit in recent years as to the air traffic control operations of the FAA. I think the factual record would bear out that they have not been "nickel and diming" us on either air traffic or safety inspectors.

There are other operations activities and other FAA accounts where, as you are well aware, our request has certainly been less than this committee would like to have seen it, particularly the AIP. But operations is a separate account.

And again, what has happened to us in the last several years is we get appropriated a few percentage points below the Administration request for operations, and then we are back looking for a supplemental. And in the meantime, things like changes of station are affected by that in an adverse way. Over the past 5 years Congress has funded FAA Operations about 2.3 percent below the budget request—an average cut of $60 million.

Senator KASSEBAUM. Since we are on OMB for just a moment, let me ask you this. Does OMB have final clearance authority over DOT and FAA staffing levels for air traffic controllers?

Mr. BURNLEY. They have final clearance on staffing levels in the sense that the number of FTE's and the dollars that we request to fund those personnel slots require OMB approval. I have been at the Department slightly more than four years now and I simply do not recall an occasion where OMB has cut back any such request as it has to do with air traffic staffing.

So again, I am not here to defend them.

Senator FORD. It is like 200 or $250 million, small amounts?

Mr. BURNLEY. No, they have not done that to us on air traffic staffing or on slots.

Senator FORD. Does that come under operations?

Mr. BURNLEY. Yes, it comes under operations. But they do not get into the business of telling us how many air traffic controllers you are going to have or how many at a facility.

Senator FORD. They just limit the amount of money you can spend?

Mr. BURNLEY. They limit it, Senator, in the request. But again, the more immediate problem we have had in recent years has been the appropriations process short funding us on our operations requests. In four of the past 5 years, the Committees have cut FAA operations below OMB's levels.

Senator KASSEBAUM. I wonder if you could explain precisely how DOT and FAA arrive at the controller staffing level of 15,225, and what basis was used to calculate air traffic controller staffing levels during the last couple of years?

Mr. POTTS. We have a set of detailed staffing standards for both the terminal and the en routes facilities, and those standards are basic decisionmaking papers for which we at the FAA take a look at forecast increases in traffic and we apply those standards. And there are two thick documents and I would be pleased to provide those for the record.

As Mr. Burnley said in his written testimony, we are reviewing those staffing standards at the present time. As a general statement, the ones that apply to en routes are generally correct. The terminal ones leave something to be desired, and we are in a review of that, of those standards right now.

In addition to that, on how the decisions are made—I am rather the new kid on the block here. I came on board on January the 6th, and after spending 27 years in air traffic control I can take some of the blame, if that is what those folks that are our critics want to put on us for asking for more controllers, because I came in and took a look at what was going on and, as Mr. Burnley alluded, we did a detailed study.

We held discussions with our regional offices. We asked them to survey the air traffic facilities, and then we sat back and took a look at that. As we already agreed, we will provide that for the record.

So we do not just throw a dart at the dartboard. We do take a very close look at our staffing needs, and that is what we ask for. We do not ask for more than we need. And I might add that I have had excellent cooperation from both the Secretary's office and OMB since I have been here in this short time.

And I think they recognize the fact that we do not just guess, we do try to make some very good, sound judgments on what we need, and that is how we do it.

Senator KASSEBAUM. I am sure you do. What bothers me, is, the question of whether we can maintain the professionalism and the quality necessary in this very exacting job.

You simply cannot go door to door to find air traffic controllers. It takes 2 to 3 years, to train controllers, and that is why I am curious as to how you all of a sudden have arrived at your 15,225 figure.

Are these controllers that were in the pipeline, that were not counted a year ago in your estimates?

Mr. POTTS. For the first two classes of this calendar year, we had an unusually high success rate at the Oklahoma City training center. We were up and over the 70 percent estimate in two classes, as opposed to 60 percent in some of the previous classes. So we did come up with some extra people.

But also, we have to take into consideration such things as Congressional mandates. Waukegan Towers is one that we did not plan on at all. We were mandated to open and staff it. And San Luis Obispo and Moses Lake and Pasco, and we——

Senator KASSEBAUM. Were there any controllers added in Kentucky or Kansas? I do not think so.

Mr. POTTS. That is just an example of some of the things that happen to us and why we need to continually review these things all the time.

Mr. BURNLEY. Also, the other thing that shifts around is retirement rate. Any time somebody wants to create an alarm, you will see these reports and newspaper accounts that indicate a huge percentage of the work force are eligible for retirement, and that is true.

There are always a substantial number of people out there who are eligible. But the FAA has found in recent years that the number of those people who actually retire in a given year is far below the percentage that are eligible, because the other people still want to work and they stay in the work force.

So there are projections made, obviously, estimates about how many will retire, and sometimes you hit it just right or above or below. So there are a number of fluctuations in here that can lead to us, as is happening now happily, doing a little better than we expected, or sometimes it may lead us to do slightly worse than we had expected in terms of hitting a particular number on a particular day.

Senator KASSEBAUM. I have a few more questions. One, I would like to know who has regulatory oversight over the flow control procedures. Who is in charge of that?

Mr. POTTS. I am.

Senator KASSEBAUM. Do you yourself monitor this and report results to Admiral Engen or to the Department of Transportation?

Mr. POTTS. I report directly to Admiral Engen. And as far as watching it on a daily basis, yes, I do that through Jack Ryan, my air traffic operations service director, and he through his manager of the facility itself. We talk all the time every day, and both of us are on top of what is going on.

Jack is more expert in it than I am, so if we get into any real detailed question, Jack can handle it. But I am responsible for it.

Senator KASSEBAUM. What is the background training of the central flow control personnel?

Mr. POTTS. All the flow controllers that work in central flow control come out of air traffic backgrounds, either the actual air traffic controller or the supervisory ranks. And I think you have some of both, do you not, Jack? Would you elaborate?

Mr. RYAN. Yes, we do. There is approximately 40 air traffic control specialists in the central flow control facility, and they come from active air traffic control backgrounds.

Senator KASSEBAUM. Then they have worked in the towers or the centers?

Mr. RYAN. Yes, that is correct.

Senator KASSEBAUM. Have any of them ever been involved in airline scheduling?

Mr. RYAN. I do not believe so.

Senator KASSEBAUM. Would experience in airline scheduling be a factor in understanding the scheduling as well as the control side?

Mr. RYAN. No, they are not involved in airline scheduling.

Senator KASSEBAUM. No, I know they are not.

Mr. RYAN. Nor have they been in the past.

Senator KASSEBAUM. I am sure the airlines wish they were.

Mr. RYAN. I would like to mention, to clarify the point about the background, we have seven or eight persons who retired from the FAA in the past 6 or 7 or 8 months who have been rehired as re-

hired annuitants to work in central flow control, who have 20 or more years experience as controllers.

Senator KASSEBAUM. So those working on the flow control would be air traffic controllers, either retired or active, is that correct?

Mr. RYAN. That is correct.

Senator KASSEBAUM. I was curious, to know whether you drew on anyone with expertise in other areas to participate in the flow control procedures.

Mr. RYAN. Absolutely. The people in central flow control, their primary prerequisite is that they have an air traffic control background.

Of course, in addition to the air traffic control specialists that work in the central flow control facility in Washington, we have a number of NWS meteorologists who are assigned to central flow control on a 24-hour basis to do our forecasting.

Senator KASSEBAUM. Is it impossible to be able to predict ahead of time what exactly the situation is going to be, say at O'Hare, when a flight from National is scheduled to arrive there?

Why does it seem that you can load a flight for a 5 o'clock departure, all of a sudden, supposedly, you are told by air traffic control that, because of weather and various other factors, you will not be able to leave and so you are held on the runway for an hour?

Mr. RYAN. Well, there is a number of different——

Senator KASSEBAUM. Would you not know this far enough ahead of time that the airplane would not need to be boarded?

Mr. RYAN. I think we do.

Senator KASSEBAUM. And the airline is notified?

Mr. RYAN. That is correct.

I would imagine that, given the appropriate kind of forecasts, 5 or 6 hours in advance we would know that capacity is going to be reduced at O'Hare at 5 o'clock from possibly 70 to 50 operations for weather reasons, or because a runway is being plowed in the wintertime.

And we put out a flow control program 2 or 3 hours in advance, in other words take that demand—maybe you have 100 airplanes that are scheduled into O'Hare at 5 o'clock and you can only take 50. So 50 are going to have to be delayed, and they're put in a queue, and the queue is computed by the central flow computer.

Now, the airlines are told through advisories by teletype message on their circuits. We have several telcons throughout the day with the airlines: early in the morning at 6:30, we have a weather telcon; at 8:30, we have another telcon with airlines.

So several hours in advance is typical, unless it is something that just all of a sudden happens at O'Hare, maybe a disabled airplane. And that does not happen very often. But the airlines know several hours in advance, ordinarily, that they are going to be delayed.

Mr. BURNLEY. Senator, if I might add, you have raised an issue here that is of real concern to us on the consumer protection side of the Department's responsibilities. In fact, Secretary Dole's letter of 3 or 4 weeks ago to the chief executive officers in the airline industry has as an enclosure a detailed description of a series of problems that we are concerned about, that we are seeing complaints about.

They are often the kind of thing that is very difficult to document after the fact. This is precisely in that category, where the plane is loaded, as you suggested, at 5 o'clock and it backs off the gate a few feet and sits. In fact, we are getting some complaints about that, and she has cautioned through that letter the airlines that we are looking at it.

We do not think, given what the FAA tells us about the flow control, that that is what is causing that to happen on occasion. That is something that the airline has decided to do for reasons that are not quite clear to us.

Senator KASSEBAUM. Well, there have been significant complaints. But it has never been my understanding that the airlines had that much notice.

Mr. RYAN. They always get an hour or two notice. Certainly the dispatcher in the appropriate airlines of those aircraft that are being delayed certainly knows. Whether in fact the information is relayed to the pilot in the briefing room underneath Washington National Airport, I cannot tell you.

Certainly, when the airplane pushes back, requests pushback clearance from the gate to go to Chicago O'Hare, he will be told that he has got an expected departure clearance time that is 15 or 20 minutes later than he may have planned on.

And consequently, that is when the passengers feel as though, I guess, they are captured in the aircraft.

Mr. POTTS. Senator, each morning at 8:30 we would invite you and Senator Ford or any of your staff or anyone that is interested to go over and sit in on our 8:30 in the morning briefing. They give both Jack and I a very detailed account of what happened the day before in terms of meteorology, in terms of traffic, and then they go over a forecast for the day.

They also go over all the navigational aid outages, if any, and those things. We have three people—the weather person, and we have an electronics technician, and our flow control people—that go over in great detail what happened the day before and what is planned and what the airlines have been informed of.

So they are definitely informed.

Senator KASSEBAUM. I am very supportive of this system. It seems to me the key is really making it work efficiently for travelers' convenience as well as for safety. That is why I asked if you had worked with anyone who had ever done any airline scheduling, so that you have input from that side of it as well.

Mr. POTTS. We do have a formal standing committee between the airlines and the FAA called the ATPC, or the AT Procedures Committee. We coordinate with them all the time, plus we meet regularly with their scheduling people and their air traffic experts. They hire a lot of ex-FAA people. We meet with them all the time. In fact, we just met with them just last week and discussed all these kinds of problems in detail. They are certainly aware of the traffic situation and their own scheduling. They certainly are.

Mr. OWENS. Maybe I could help a little bit in an understanding of the decisionmaking when we make a decision on flow control. Those things are done in consultation from the central flow control facility here in Washington with the airlines, their dispatchers,

and their weather people, and the facilities that are involved like Chicago center.

When a decision is made to put in a program because of weather, or because of reduced capacity, air space or at an airport, a formal teletype message is sent so that everyone knows exactly what the program is and how it is going to flow through the system.

Senator KASSEBAUM. I think sometimes it may be just a lack of communication, particularly communication with the traveling public.

Anyway, those are all the questions I have, Mr. Chairman, other than some I would like to submit for the record because I am very anxious to have the exact figures.

Senator FORD. Thank you very much, Nancy. I have been to your center, Mr. Potts, and I have viewed it. The next time I go I am going to take some No-Doz for the staff.

Mr. Burnley, do you have any estimate of how the expanded flow control will affect airline schedules? We have talked a little bit about the increased delays thus far, and Mr. Potts came up with a figure which was even more than I had anticipated. How will it affect airline schedules?

Let me tell you how I read it. I think this flow control will actually reschedule the airlines, or set the schedule for the airlines rather than the airlines setting their own schedule.

Mr. POTTS. Sir, we certainly don't want it to do that. There is no question, on the other hand, as we discussed earlier in answer to your questions, it is already showing some incremental increase in delays. The difficulty that we've got in being absolutely precise as to what that, in fact, is going to be over the summer is that you've got a variety of other measures including the scheduling meetings and scheduling changes that were made as a direct result or indirect result of the scheduling meetings.

You have the East Coast plan in effect. To try to net all this out to say to you today that by, looking back from September 1, we will have averaged x number of delays a day and get down to the number, I would think is almost impossible because of the fact that—Again, we are in a period of very rapid change.

Mr. BURNLEY. You and Senator Kassebaum both touched upon a very important point here and that is communications, particularly with the airlines between the FAA and the people that are running the system literally everyday and their counterparts in the airline industry.

We do feel that this approach where you are looking at the traffic day by day—they have identified the sectors particularly to watch, and they have plans on how to manage those—but looking at it on a day-by-day basis is a better system than one that has been suggested by some that you might extend the high density rule. That is a permanent change and you end up, perhaps with more certainty, but you also end up with a lack of flexibility. In other words, this week-end where you have very few delays, you don't have the ability to back off when you have the high density rule in place and let the airlines fly as and when they please.

I would like to be able to tell you that we can tell the airlines to a certainty, down to give or take 50 delays a day, what it is going to look like through the summer and which flights are going to be

delayed. We cannot do that. What we can do on the other hand is make sure that we are maximizing communications between the operational people and the industry and the FAA.

Frankly, I must say there have been days when we probably, in retrospect, probably should have had more than that. The leadership of the FAA, I know from talking to Admiral Engen, is very focused on that, and Mr. Potts has indicated a similar focus. It is terribly important that we stay in constant touch with the airlines on this.

Again, I do not offer this as a perfect solution. I think it is simply better than any alternative that we have had suggested to us.

Senator FORD. When you account for a delay from one of the hubs, is that delay carried out two, three, four, even five stops that airplane will make instead of being one delay? Is that six?

Mr. RYAN. Generally speaking, as I understand your question, it is one delay. If you depart Washington National 15 minutes or more late, and that delay is not an air carrier delay because of luggage or meals, or the pilot not showing up or whatever, an ATC type of delay, that is one delay.

If you arrive at O'Hare 15 minutes late, what you suppose is the estimated time en route did not change, that is not another delay unless we held the airplane for another 15 minutes en route, which is not done too often.

Senator FORD. That airplane would be consistently late for the rest of the day?

Mr. RYAN. It may be slightly late, but I think my experience is they will make up some of the time unless it has been delayed 2 hours.

Senator FORD. Is that not a safety problem? When you say to the pilot that we are trying to cut down on our delay a little bit. Rather than arriving 20 minutes late, you tell the pilot to arrive only 12 minutes late. Would not the pilot like to get there on time?

Mr. RYAN. I do not see that as a safety problem.

Senator FORD. You do not see if the flight is delayed throughout the day. If for example, you don't keep records on whether there is five delays, or three delays, whatever it might be, going from Washington to Louisville to Lexington, or from Washington to Dayton to Lexington to Louisville. They leave Washington 15 minutes late, they are late everywhere along the line. It is very difficult to make it up, so every flight is late. It is not just one flight. So we mark up one flight, one delay. It actually might not be delayed but one time, but from then on during the day, or during the course of that flight, that flight number is late.

Mr. RYAN. That may be true depending on whether the air carrier in question has adopted an internal procedures where if they are going to be late everyday, they build in 15 minutes in their block time.

Senator FORD. Then you run into somebody elses schedule, or somebody else changed their schedule and you get back to the same thing of everybody leaving the same time and you have another problem out there.

It seems to me if you want to be here this morning, instead of coming out on a flight, this morning, you should leave yesterday.

Mr. POTTS. I agree with you entirely, if each flight number is the same tail number airplane, if it is the same piece of equipment all the time, but it is not. We do not have the capability of tracking that in our system at the present time. So some of what you say is actually true, but we could only confirm that if we knew the actual serial number of the airplane. We would have to know the equipment, and we would have to know the turn-around time. Some airplanes may have a two hour turn-around time before the next flight number is assigned. Others may have only 50 minutes, and then what you say would be true. We would have to explore that in order to determine——

Senator FORD. Well, if you are delayed leaving here, you are delayed getting there, are you not?

Mr. POTTS. That is true, but you may not be delayed in getting out on that same piece of equipment.

Senator FORD. I understand a particular leg of a flight may be the termination of that flight, and it is not schedule to begin service for an hour and a half. If you are only 15 minutes late, you can make the departure time unless you are delayed again. They could be caught in that catch 22 and be delayed again. The 15 minutes that time could be 30. So that flight is triggered.

What usually occurs among the airlines is that an airplane continues in operation, they go to two or three stops. They don't go to one destination and terminate, that plane continues on to other destinations.

I can see one delay by FAA could mean late arrivals and departures in a good many others. I do not know what the percentage would be. It puts a hardship on the traveler. It puts a hardship on the airlines. Jack, I think honestly there will be some pressure to get that flight there to have it on time so they will not be quite as late on the takeoff.

Mr. RYAN. I think the important thing is to get to the root of why the FAA air traffic control system delayed someone.

Senator FORD. I understand. That is for safety reasons.

Mr. RYAN. In the case of Atlanta, between 3:15 p.m. in the afternoon and 4:14 in the afternoon there are 170 operations scheduled, and on a good day the Atlanta Hartsfield Tower might be able to do close to that—on a perfect day when visibility is clear for 75 miles.

When you have a slight perturbation in the system that may have to do with thunder storms between here and Washington——

Senator FORD. If you are on the way to heaven you have to go through Atlanta.

Mr. RYAN. I think the problem is that someone assumed when they scheduled that that we are going to have an overly perfect system. The important point is that the FAA is not going to allow anymore airplanes in the system than can be safely handled.

Senator FORD. What you are saying is if they have 170 flights in an hour's time, they cannot make that number on a perfect operation?

Mr. RYAN. No, sir.

Senator FORD. So they cannot do that. You, in essence, are going to reschedule. What if all the flights are late? Do you say to the

consumer, well, eventually not fly, or change his personal schedule if the airline does not change theirs?

Mr. BURNLEY. We, as you know, have had a series of exercises underway to address the problem of realistic scheduling. As these gentlemen have described today in some detail, there are a variety of mechanisms by which they try to let the airlines know, most directly by talking to the dispatchers as they talked about earlier about what is coming up. We would all like to see more notice than we get now, but that is how it works today.

We have had the scheduling meetings to try to spread these peaks. Jack mentions Atlanta. That is the one airport where we have said publicly on numerous occasions we did not get quite all the results we wanted from those scheduling discussions. We continue to talk to the major carriers there about Atlanta. We have seen progress. I do not want to overlook that progress.

Additionally, we do have scheduling investigations open on four of these major hubs looking at whether or not the schedules are realistic. We have an obligation within the limits of safety, which absolutely comes first, as I am sure you recognize and agree, to do what we can to push the efficiency side of our responsibilities; never, however, pushing it to the point where it affects safety. We are looking for ways to be more efficient constantly.

We also have an obligation on the departmental non-FAA side that led to the series of actions this spring to make sure that the airlines are honest when they put those schedules together. That is why we have gone through that process. As you know, that is why we have an NPRM out for comment.

You touched upon a terribly important point in your question which is if concern to us in looking at delay disclosure requirements in that notice of proposed rule making, and we have explicitly asked the public to comment on this problem. The problem is at what point through a delay disclosure requirement do you put just the kind of pressure on a carrier and crew that you were talking about to make up time.

Again, we do not want any of our rules or procedures to cause that to happen. In going through this rule making exercise, that is a point of very substantial importance to us to make sure we understand and avoid any such pressure being created.

Senator FORD. Are we not beginning now to take the blame off the airlines? Up until now we have been blaming them for delays and late arrivals and late take-offs. Aren't we in a position now to say the blame has to be shifted even though it may be for safety reasons, that blaming the airline up until now is almost a moot question?

Mr. BURNLEY. No, sir, I would hope that is not the case. We have certainly tried in all of our public utterances in recent months as this issue has been under a good deal of public discussion and scrutiny to make very clear that it has been true for quite a few years, and is still true today, that roughly two-thirds of all the delays are weather driven. Those are weather driven delays that the air traffic control system imposes on the airlines.

So we have never, I hope, suggested that it is all the airlines' fault. On the other hand, we have this spring focused on those areas and scheduling practices where the airlines may and that we

have open investigations. I underscore the "may." They are not as realistic as they need to be and should be so that we all have the best possible information when we go to the airport.

Senator FORD. Is realistic used in lieu of honest?

Mr. BURNLEY. I think that realistic and honest are both important. It may not be out of conscious dishonesty. It may simply be undue optimism. I would hope that we can avoid accusing anybody of dishonesty until we have evidence that that is what it is.

Senator FORD. There are a lot of inferences being made. Under the current rulemaking, which is devoted to addressing airline delays as such, and in light of the fact that the expanded flow control will lead to increased delays—we've got that on the books now and everybody agress to that—what actions can be taken so as not to penalize the carriers for FAA restrictions, yet help our traveling public?

Mr. BURNLEY. That is exactly the set of questions that we have asked for comments on: How can you devise a delay disclosure system that gives people the information they want and ought to have so they can make their travel plans while not, on the other hand, putting pressure on the safety side, whether it is the airlines, or the airlines in turn putting pressure on the FAA? We do not want that dynamic either.

So the answer to your question is we do not have the answers to that, but that is precisely why we have an NPRM out there with a series of ideas, seeking comments from the public and the industry and from anyone who wishes to comment about which is more likely to get us where we want to go.

If we thought at the Department that we had even a quasi clear sense of which way to do it precisely, then we might have put out a particular proposal for comment. The fact that there is a great deal of uncertainty on how you do this most effectively without affecting the safety side is why you have a range of proposals out of us in the NPRM.

Senator FORD. How many controllers or support people retire every year?

Mr. BURNLEY. I do not hear a certainty here, Mr. Chairman. If we could submit that for the record.

Senator FORD. Jack, you do not know how many controllers you lose a year based on retirement?

Mr. RYAN. Controllers and supervisors, somewhere in the neighborhood of 400, I believe. We need a precise answer to that question.

Senator FORD. 400 to 500, is it not? And if you ask for 1,000 and you lose 500 a year, you are taking one step forward, two steps forward, and one step backward, are you not?

Mr. BURNLEY. No. Let me handle that, if I may.

The increase we have requested is for a net increase. All of these numbers are—in the last 3 years, we have asked, as you know, for 1,000 over fiscal year 1986-87. The 225 that we had asked for originally for 1988 that we in fact are going to have, we think, by September 30, those were all net increases after you take into account all the retirements and all the people that come into the academy and into the training process.

Senator FORD. When did you make that judgment? Was it always understood that it was net?

Mr. BURNLEY. Yes, sir. Our requests, our budget requests, were always, when we asked for an addition, a net.

Senator FORD. I want to get into language with you just a little bit. Last week the Department proposed a rulemaking which would require all aircraft—and you mentioned this earlier in your opening statement, I believe—operating within 30 miles of each terminal control area to be equipped with a Mod C altitude reporting transponder.

What is the time frame for finalizing that rule, and how many aircraft will be affected?

Mr. POTTS. Do you know what the comment period was?

Mr. RYAN. The closing date is August 17.

Mr. POTTS. August 17 is the closing date for the receipt of comments, and then we will make a judgment after that.

As to the number of airplanes that it will affect, it will affect only those aircraft that choose to fly in that airspace. There are about, to my knowledge, around 70,000 some airplanes that do not have the transponder with the Mode C today, and there are about 44,000 that do not have electrical systems.

But those do not normally fly in this airspace.

Senator FORD. All right. Let me ask you this, then, Mr. Potts. In this new notice of proposed rulemaking on transponder equipment requirements while operating in TCA's, there is a new requirement for—Mod? Mode C altitude reporting capability for aircraft operating in all TCA's within 30 miles of a primary airport with a TCA at altitudes of 12,500 feet and below.

Mr. POTTS. That is correct.

Senator FORD. The regulation states that the equipment will be operable, is that correct?

Mr. POTTS. Yes.

Senator FORD. Well, my question, Mr. Potts, is does the equipment have to be operating?

Mr. POTTS. The equipment in the aircraft, yes. We have another rule that says if you have that equipment it must be on and be operating.

Senator FORD. Where is that?

Mr. POTTS. That is in another rule.

Senator FORD. Do you ever have those rules close together or written together, so that they would understand it? I would read this rule and it says operable. It may be operable, but it is not turned on.

Why don't you say operable meaning turned on?

Mr. POTTS. I defer to our lawyers on that.

Senator FORD. I do not care about the lawyers. You ought to be able to write something that every fellow that gets in an airplane would understand.

Mr. POTTS. I think they understand it, sir. They take a written test on those rules. And there are other parts of that rule——

Senator KASSEBAUM. The general aviation people understand it.

Mr. POTTS. Sure they do.

Senator FORD. If you read this, that rule, without knowing you're supposed to go to someplace else—I am sure that is the reason I am

not a pilot. I got 300,000 commercial air miles in the year 1986. I have been up there a day or two.

However it only states that it be operable. When you read that, that does not mean it has to be turned on. So it just seems to me that it is confusing, Mr. Potts. I may be wrong.

Mr. POTTS. Mr. Chairman, I agree with you.

Senator FORD. Why do you have to go to another area or another rule or something to find out that you have to turn it on? It has to work in one place and then in the next place you say turn it on.

Mr. POTTS. Well, Mr. Chairman, I think that your point is very well taken and we will try and get that straightened out.

Senator FORD. All right. I have got a couple more.

Mr. POTTS. It was a proposed rule, and we will treat that as a comment on the rulemaking and we will straighten it out.

Senator FORD. You will have a comment from me, and it is on the record and I swear to it.

Under the new flow control plan announced by Mrs. Dole, would there be an increase in the number of airplanes in a holding pattern?

Mr. BURNLEY. Absolutely not. Mr. Ryan would like to speak to that.

Mr. RYAN. No, sir, there is no requirement for increased holding. And any delay that is incurred will be taken on the ground at the airport of departure.

Senator FORD. So there would be no number of airplanes in a holding pattern?

Mr. RYAN. That is correct.

Senator FORD. Mr. Burnley—and I am sure you have heard about this show called "Face the Nation." Senator Lautenberg who appeared with you on that show disagreed about whether FAA had turned back a billion dollars of unused funds that were committed for the NAS plan.

The show ended without clarification. I was watching it with some interest. Can you explain it to me now? I did not get an explanation for that at the end of that show?

Mr. BURNLEY. I will try. Senator Lautenberg sent a letter to me that arrived at the end of last week asking for further explanation, and so I am going to write back to him shortly.

Senator FORD. I would like to have a copy if you do not mind.

Mr. BURNLEY. Yes, sir.

Under a circular, an OMB circular that has been in place for a good many years called A-109, we, like every other Department and agency, are required when we come to the Congress and ask you to appropriate funds, to tell you—for each contract or procurement it is we are asking for money on—how much we think it is going to cost.

And we are not allowed to do partial requests, where we would come up here, if we have got a $100 million procurement, say, and ask you for $25 million this year and then come back the following year and ask for $25 million.

When we sign the contract, we are supposed to have gotten you to give us the authority, of course, first, and then through the appropriations process to have appropriated the funds. Now, what that means is, in a procurement that is multiyear, as virtually all

of our NAS plan procurements are, because they are large and complex procurements, when we come to the Congress if it is a $100 million, three- or four-year procurement, we are asking you to appropriate the money for the entire project for us in a given fiscal year.

And obviously, we spend it over the life of the contract or the procurement. That is not turning the money back. In fact, we are required both by A-109, by OMB Circular A-11, which governs our budgeting and accounting processes, and by what the Congress expects in the way of information from us, to be on the front end in the posture of asking for all the money it takes to fund the particular contract.

And I think it is really misleading to characterize that as turning back the money not obligated after the first or second year.

Now, on the other hand, if a procurement is delayed and we are not able to spend the money on the schedule that you had originally set out, we are still going to need the money. But obviously, because the money is earmarked by project, it is going to sit in the account until we need it.

So I think that, to avoid misunderstanding on this, it is probably a fairer question to ask of us on one procurement versus another, are you spending as much as you said you were going to spend in a given year, versus turning money back. The money will be spent and the money is committed.

We have got to have the funds that are in the NAS plan, in the F&E account, that have been appropriated down to the last penny that has been appropriated, just as we have asked for them, because the contracts have been signed and the money is being spent over several years in these very large, complex procurements.

Senator FORD. In an effort to accurately compare pre-strike and strike traffic control staffing, can you tell me the number of controllers which were actually controlling aircraft prior to August 3, 1981, and the number of controllers which are actually controlling air traffic today?

Mr. BURNLEY. We will submit that for the record. Mr. Ryan says he does not have those numbers with them, so let us get the precise numbers for you.

[The material referred to follows:]

CWF HISTORY—TOWERS AND CENTERS

	July 31, 1981	Dec. 31, 1981	Dec. 31, 1982	Dec. 31, 1983	Sep. 30, 1984	Dec. 31, 1984	Sep. 30, 1985	Dec. 31, 1985	Sep. 30, 1986	Dec. 31, 1986	Apr. 30, 1987
FPL	13,170	4,984	5,767	7,184	7,580	7,785	8,315	8,425	9,528	9,555	9,563
GS 11/12/13	1,724	427	1,628	2,476	2,712	2,565	2,071	1,929	1,714	1,707	1,628
Operational controllers	14,894	5,411	7,395	9,660	10,292	10,350	10,386	10,454	11,242	11,262	11,191
GS 5/7/9	1,340	2,477	4,267	2,325	1,921	2,030	2,146	2,059	2,047	2,064	2,474
Total controller	16,234	7,888	11,662	11,985	12,213	12,380	12,532	12,513	13,289	13,326	13,665
ATA	0	0	1,043	1,227	1,501	1,469	1,466	1,465	1,514	1,479	1,467
CWF	16,234	7,888	12,705	13,212	13,714	13,714	13,998	13,978	14,803	14,805	15,132

Senator FORD. With the 13 percent growth in air traffic in the centers since 1981, explain to me again why FAA has almost 100 fewer en route sectors today than in 1981?

Mr. RYAN. Just following the strike on August 3 of 1981, we had completed an initiative that started in fact before the strike, and that initiative was to resectorize those sectors within the 20 centers, make them more efficient, make them more productive.

There were some out there that had been there a long time, and that initiative reduced those sectors to less than 600 back in 1982. And now we are adding sectors as hubs are added, traffic patterns have changed.

So the net effect of what I am telling you is that there were a number of sectors prior to August 3, 1981, that were inefficient and in fact were part-time, and some were not used at all. They were part of the total on the books as 721, but they actually were not used.

A lot of them were doubled up and tripled up all the time prior to the strike.

Senator FORD. Well, what changes have been made to improve the quality of training or what changes have been made to lower the cost of training since 1981?

Mr. RYAN. Are you talking about the center, the training of air traffic controllers?

Senator FORD. Yes.

Mr. RYAN. As far as my recollection—and I do not claim to be the training expert—the training that air traffic controllers receive now and the training that they received prior to August 1981 is ostensibly the same with regard to the amount of hours that they spend at the academy.

We have not reduced the amount of training that they have received. We have certainly changed the screening process since before the strike and have updated that, so that it provides us with someone who is well suited to be an air traffic controller, and consequently when he goes or she goes to the academy there is a greater chance of success than there had been before.

Senator FORD. There are some things that are just too good to be true, and I am hard pressed to try to keep you much longer. However, the FAA and the Departmental witnesses have repeatedly indicated that the controller work force staffing is adequate to meet existing needs and the level of staffing that was being requested was sufficient to meet all anticipated needs.

Then all of a sudden we find that you need 955 more, and you told me 580 would be controllers and the balance of it would be support staff.

Did it just dawn on you that you need 955 more controllers? Or did you just walk out on the balcony and look at the stars and say you have got to have another 955, and if you do not do that you are just not going to be able to make it work?

It looked like to me in January when you submitted your budget you would have known that. It seems strange to me that when you get up to a point that you meet a Senator and have a dispute, then a few days later it costs a million and a half a minute, because you now want $51.5 million for 955 more controllers and backup.

It just seems like an overnight decision; the light came on and you changed your mind.

Mr. BURNLEY. As Mr. Potts testified, it did not come on overnight. In fact, several months of work had gone on.

Senator FORD. Why did you not explain that? Maybe you failed to communicate that to us. We are trying to make an assessment now.

We were all saying, give you a thousand more, you need a thousand more. And you kept saying, no, we have an adequate number, we only need 225 in 1988. Then, even after the legislation gets out of this committee, you finally make a decision you need 955.

We have been stonewalled up to a point.

Mr. BURNLEY. Senator, I am very sorry you feel that way.

Senator FORD. I am sorry we do, too, because we should have communicated better. You were saying no, we do not, we were saying yes, you do; and then all of a sudden you say yes, we do.

Mr. BURNLEY. If I could comment or answer your question, as I pointed out earlier, on January 29 Admiral Engen testified to this committee that when and if he thought he needed more he would come to the Secretary and ask for them, and then he would come up here.

Additionally, in mid-April he did say in a press conference: If I need more than the 15,225, I am going to ask for it.

Now, one thing that is very, very important here—and you mentioned the 16,000 and you mentioned it at the outset of the hearing.

As I said in my prepared testimony and as Admiral Engen has testified here, including on May 28, simply writing legislation that says you will have another thousand controllers in fact not only may not get us where we want to go, it may take us away from where you want us to go.

And the reason is that there is a staffing analysis process, and it did yield a number 955, of whom 580 of that amended request are to be controllers. Now again, I do not mean to use this as an excuse, but it is a truth that the FAA's traffic projections that were done in putting their budget request together in the summer of last year and the fall were that the traffic was going to grow in the next year or two at a 3- to 4-percent rate.

Looking at that again this spring, they found it growing at a 7-percent rate.

And here is all I can claim in the way of improvement or progress over the years. Just before coming up here today, someone gave me a copy of another budget amendment for the FAA, where the President submitted to the Congress a budgetary amendment to provide a more effective use of FAA funds in the operation of the air traffic control.

And the Director of OMB said the amendment is occasioned by a projected increase in the level of aviation activity in the very fiscal year. They were already in the fiscal year for which they were asking for a budget amendment.

That was signed by Lyndon Johnson in 1967. Now, we at least have made enough progress so we amended our request before the beginning of the fiscal year for which we are asking for the additional people. We have gotten that far since 1967.

But it is still the case that the process by which the FAA projects traffic is imperfect, and that is why in my opening statement I said, and I sincerely believe, they are entitled not to be chastized, but for credit, when they will do a midyear review and then they will come to you and say: We have looked again; our projections we think are off either high or low.

In some recent years we have overestimated. That has been the more recent pattern until just this year. And here we are asking for an amendment, and then the Congress gets the opportunity to scrutinize us very, very thoroughly, as you always do, about why we have asked for it.

But believe me, it does not come from the stars, and it doesn't come out of my office or anywhere else in OST. The request came in this instance, as it always has in my experience, up through the FAA process. And then we take it to OMB, where again we have never once been turned down in my experience on a request for increased people for the air traffic control work force. And then we bring it to you.

And I would hope that there would be no mystery in this. In fact, on May 13, if my memory serves me correctly, in a meeting with members of the majority staff of this committee, Mr. Owens, sitting here to my left, did tell the staff at that time that they were in the latter stages of a staffing review and that we would be asking, he thought—he said, do not hold me to the numbers; they are preliminary—for several hundred additional people in the controller work force.

Senator FORD. Well, Mr. Burnley, I hope 20 years from now we do not have to quote what you said. We will go back to Lyndon Johnson. We are living in 1987, not 1967. And he did during his term have a balanced budget.

Mr. Owens, what on May 13 or thereabouts did you tell the majority staff?

Mr. OWENS. I believe the question was asked—it centered around the 1,000 controllers. We got into a discussion about, as Mr. Burnley alluded to, that it was not really the controller number that would fix anything, but a combination of controllers and support personnel.

Then I stated that we were in fact reviewing the traffic increase and the additional controllers needed for some airport radar service area locations, and that it was my opinion at that time that it would result in a request for additional controllers.

At that time they pressed for an exact number, which of course I could not provide. But I believe there was some discussion of something like 400, 500, 600, something like that.

Senator FORD. Would you say that our request or our estimate was closer in the beginning than yours was?

Mr. OWENS. The 1,000?

Senator FORD. Yes, sir.

Mr. OWENS. Only by the number, but not by the fact that your number 1,000 was controllers and our number includes people that are in addition to air traffic controllers and that are absolutely essential to the operation of the air traffic control system and our field facilities.

Senator FORD. What do you think of the new group that has been formed among the controllers, who are saying they need 3,000 more? They are actually the ones that are working.

Mr. OWENS. I would like to see their staffing standard also.

Senator FORD. You disagree with them on the need for 3,000?

Mr. OWENS. For 3,000 from 15,225, yes, sir, I do.

Senator FORD. OK. So they are thinking about 18,000 and we had 16,000 in 1981.

Mr. OWENS. Yes. But remember, there is one other factor that nobody has mentioned yet, and that is that a controller in 1981 and before worked on an average of 3½ to 4 hours of actual control duty. The controller of 1987 works on an average of 4½ to 5 hours—I'm sorry, 5 hours to 5½ hours of actual control work.

So that productivity increase is reflected in fact in a lower overall controller number.

Senator FORD. You burn an individual out faster if you work him longer and harder, do you not?

Mr. OWENS. You burn him out faster?

Senator FORD. Yes. If you worked 3 to 3½ hours and you shift that to 5 to 5½ hours, you are causing him to work more hours. Does that not cause fatigue?

Mr. OWENS. I would hope that it does not. They are rotated. They do get breaks. They do take lunch breaks. Ordinarily speaking, I would——

Senator FORD. I hope they get lunch.

Mr. OWENS. Five hours is a reasonable time period.

Mr. BURNLEY. I might note, Senator, that certainly one of the facts that is on the public record is that a major complaint of the controllers all through the seventies and at the time of the PATCO strike was burnout and fatigue. So it does not seem to be solely a variation of how many hours they spend at the radar.

I am not passing judgment one way or another on that complaint. I am just saying that even when the average was more in the 4-hour range there was a similar kind of complaint.

It is very tough to judge such a complaint when it is made in a broad-brush way.

Senator FORD. You have had a good memory apparently of May 13, May 28. You begin to tick off these dates. Let me tick off one, Mr. Burnley. On May 30 you and Senator Lautenberg appeared on "Face the Nation" and that disturbed this Senator considerably. I want you to think about it before you answer your question.

During that program, the Senator stated that while he thought the air traffic system was safe, he also felt that it could be made a lot safer. You dismissed the Senator's remarks as, "Gibberish, nonsense, and untrue." You went on to quote the NTSB's letter to Admiral Engen which called for a reduction in air traffic density, and you said, "DOT agress with what NTSB proposed. Indeed, last Thursday, Mrs. Dole announced her plans to do just that."

I am assuming that this new flow control plan is being implemented to make the system safer. I would hope you would say yes to that.

Mr. BURNLEY. Absolutely.

Senator FORD. Now I ask you, Mr. Burnley, how you can refer to the Senator's observation on May 30 that the air traffic system could be made safer as "Gibberish, nonsense and untrue, "and then turn around on Thursday and introduce a plan to slow down the system to do the very same thing the Senator was asking for, to make the system safer?

Mr. BURNLEY. With all due respect, Senator, I do not see the sequence in quite that way.

Senator FORD. I could understand you would not see it in that light. I am just an innocent bystander listening to you and another Senator.

Mr. BURNLEY. I must say—Let me make a couple of points if I might. No. 1, Senator Lautenberg answered before I was given an opportunity to answer.

No. 2, among the things that he said in that answer was that the FAA was guity of mismanagement, and he used the word "cover-up," and that was also in that first answer. He uses in broad brush "mismanagement," and he uses, without defining what he means, "cover-up."

Senator, as you well know, since the Watergate period the word "cover-up" is a very pregnant, hyper-charged, emotional word. People have gone to jail in the last decade for cover-up.

Senator FORD. And there may be some more.

Mr. BURNLEY. There may be. But I will tell you that when anyone, whether it is a U.S. Senator, and I was quite shocked that a U.S. Senator would go on national television and use that word in this context, or anyone else charges the FAA or the Department

with a cover-up and just lets it sit there, that I am going to take very strong exception to that if I am given the opportunity.

In terms of whether or not we suddenly did just what had been recommended, I do not want to get in any further trouble with you by going back and citing dates and specific statements, but if you will forebear for a moment——

Senator FORD. I have plenty of time.

Mr. BURNLEY [continuing]. And let me have another turn at bat in that respect, we do not think that the announcement last Thursday, which was an announcement that we were now doing and had been doing since the preceding Thursday just what we had been saying for many weeks we planned to do, in an abrupt change in direction, or should have been a surprise to anybody.

To give you concrete examples as to why we do not think that, again, Don Engen had testified in front of this very subcommittee at the hearing which we have referred to repeatedly on May 28, in detail, about these plans. There had been an article in the *New York Times* on April 30 which had quoted the Administrator about these plans. That is April 30, well before the NTSB recommendations came out.

Mr. Ryan, who is sitting here, was quoted on May 14 in a front page *Washington Post* story describing in detail the sectors and talking about the fact that we had new computer technology which will enable the FAA to monitor those areas. Mr. Ryan was interviewed on McNeil-Lehrer on May 14, and he said, "We will either reduce air speed, reroute traffic around affected sectors, or delay aircraft at the airport, " describing this system in detail.

The May 15 *Journal of Commerce* had an article which quoted an FAA spokesman to the same effect. The front page of the *New York Times* on May 18, there is a story by Richard Wick which once again quotes Mr. Ryan in extensive detail about the analysis that had begun May 4 and talks about how we are going to put the very procedures in place that we announced last week had in fact put in place.

The *Washington Times* on May 18 ran a similar story. Philadelphia Inquirer had similar quotes of FAA spokesmen on May 19. The *New York Times* again quotes Admiral Engen on this on May 28.

I do not think, therefore, that there should be the slightest sense that we have changed direction, or anyone should be surprised when we said last week that in fact we were now doing what we had repeatedly publicly said we planned to do.

With respect to the NTSB recommendation, most of these articles, after those recommendations were issued, quote Don Engen and other FAA spokesmen making a very important point, and that was that we agreed substantially with the NTSB's recommendations on the need to do something about air traffic this summer, and we had a plan to do it.

Last Thursday we announced that we are in fact doing what we said for many weeks we planned to do. I think that the record is very, very clear about the fact that we have been out there saying it.

I cannot account for the fact if a given U.S. Senator on a given Sunday on a given television program——

Senator FORD. You gave that to Lyndon Johnson 20 years ago.

Mr. BURNLEY. Yes, but I cannot account for why that did or did not register prior to that broadcast. I must say that, again, I am sorry that you took exception to my language on that day. I hope you would also, upon reviewing the transcript of that, share my concern about the use of the words like "cover-up," because that really is a supercharged term.

Senator FORD. I will go back and look at it on video, which I have. It is interesting to watch you. You have had a pretty good class since last Friday. I think it has been excellent, and whoever has been helping you, I want to compliment that individual.

Mr. BURNLEY. The same people as usual, Senator.

Senator FORD. No. I think there has been a little bit different attitude portrayed, and I want to compliment you. I do not want you to get away from here thinking I am all bad. Just almost.

Mr. BURNLEY. I hate to say this, Senator. As my opening statement said, we give you a lot of credit for help and support on these issues.

Senator FORD. I know you hate to say that. I am going to do my best to keep you right up to where you are suppose to be. I may not sleep very much, but I am going to be after you pretty good.

I want to admit that I am not exactly sure that we were talking to Admiral Engen completely about air space in the subcommittee's hearing. For some of that time, I think we were talking about space at airports, aprons, runways, etc. If you are trying to say that all of that day, and all of that hearing, and all of the statements were made on air space, I think you need to go back or have your people go back and look at that hearing to understand that it was not all air space that day.

Therefore, his remarks and the necessity to have improvements at the airports, were part of that hearing. There may be a little bit on both sides. I am interested in looking at your remarks and comments on your NPRM so that we can understand the current situation. I want you to be very, very careful that from this day forward that we understand each other, and we are going to say this is June 15 at a little after four p.m., and from this day on I am going to mark down my dates, and I am going to mark down the content of my conversation so that I can refer to my notes and we will know exactly what is there. I am going to the record now since you have gone into that in such detail, and I am going to spend an extra hour a night reading them, Mr. Burnley, and you may be back up here again, and we will look at some of your aviationees and we will be able to understand each other a little bit better.

I am very concerned about your policy on air flow. I am of the opinion that you are going to reschedule airlines under this policy. It may not be bad, but I am not sure that they understand. Maybe they do. However, I do not believe they have been brought into the discussion except to explain to them what you have done. Were there any consultations by anyone? Like Senator Kassebaum said, anybody that deals with air carriers, have they ever arranged a schedule? Do they understand the schedule? Jack said no, he did not think anybody had consulted them.

Mr. RYAN. As a matter of fact, tomorrow morning a number of airlines are going to visit central flow to attempt to mitigate some

of the problems with the delay we initiated starting on June 4. In other words, look at another way of lowering the sector work load in certain sectors, possibly by rerouting airplanes instead of having delay on the ground. We are going to have a number of airlines in tomorrow to discuss how to do that.

Senator FORD. Are you changing your approach? You are going to delay them in the air by redirecting them?

Mr. RYAN. No, sir. We might redirect them.

Senator FORD. That is the same thing. You do not keep them on the ground. You keep them in the air longer.

Mr. RYAN. I do not want to confuse——

Senator FORD. I do not want to be confused anymore than I already am.

Mr. RYAN. Rerouting and airborne holding is not the same thing.

Senator FORD. I understand that, but I am talking about delays. If you reroute, and as you explained it to me the other day at your central operations, that you may take one flight from Chicago to Indianapolis, to Atlanta, and back up the coast to get another flight into Washington or New York. That flight is in the air a longer time than if it flew directly from Chicago to New York. So that is a delay in arrival, even though you have used the redirection.

If you redirect at 8 p.m. from Chicago, Indianapolis, Atlanta and back up to New York, then you have delayed that flight.

Mr. RYAN. It may not be a delay. If we decide, for instance, that from now until September 1, 1987 that we are going to reroute an American Airlines flight going to DFW and add another 11 minutes to his estimate time en route, I would expect American Airlines to change the arrival time at DFW by adding 11 minutes which puts the airplane back on time as far as the consumer is concerned.

Senator FORD. No, no, no. You have to do that after you write your schedule book. But you rerouted him for a different reason, as you explained it to me out there. You stated that you had to reroute that American Airlines flight 239, or whatever it might be, and made him late as a safety measure. If you are going to do that for safety reasons, then they do not know whether you are going to do that daily or not, unless you are automatically going to reroute him every day.

As I understand it, you look at the flow every day, and if you have a problem, then you are going to hold them at the airport. Now you are saying you are going to bring the airlines in to see if you can't delay them in the air by rerouting them.

Mr. RYAN. It may turn out, Senator, that the airline would rather take the additional flight time than sit on the ground at Washington National. If in fact they opt to do that, and if in fact that solves our ATC problem in an en route sector between here and DFW, that is fine with me.

Senator FORD. What do you do with the other flights? It is bound to trigger on something, so it gets to be an interesting shuffle, doesn't it?

Mr. RYAN. Obviously you have to coordinate the changes.

Senator FORD. You use coordinate or shuffle. I guess you deal with airplanes and I play the cards. It is still, in my opinion, going

to put a massive burden and strain on air carriers, and you do it in the name of safety and no one faults that.

I think that on a flight the other day when the pilot came on, and I think I have said this publicly, when the pilot came on and said we are being delayed *x* number of minutes and that we are being delayed by the controller, that was usually the end of the statement. But he continued that statement to say that the flight was being delayed for safety reasons. Well, that made everybody on the airplane feel much better about waiting on the runway out there another 15 or 20 minutes.

Somewhere there has to be an educational plan here so that that is done. Maybe the air carrier does not believe that you are doing it for the safety. Maybe he believes that you are overloaded and you are trying to save face. You have too much to do and too little to do with it. The problems have been mounting. They have been mounting month-to-month, year-to-year. It bothers me that the trust fund has been sitting there and going up and going up. I have not seen an OMB request to Congress that has been as much as the Department has asked for.

Mr. BURNLEY. I do not want to in any way mislead you on that. I think on operations as compared to the overall FAA request, where we have F&E, R&D, and also AIP, that you will find that we have been doing reasonably well with OMB over the last several years on what we have requested for operations particularly for controllers and safety inspectors, and the Secretary has not cut any controllers or inspectors requested by FAA.

Senator FORD. This year they cut you about $40 million—OMB's request to Congress was $2,799,8, and we approved $2,8ll,229 which was more than OMB requested. They cut you about $40 million over you request to OMB, and about $26l million less than FAA requested to the Department.

Mr. BURNLEY. I would be happy to review those numbers. I suspect that——

Senator FORD. That is under operations only.

Mr. BURNLEY. Yes, sir. I suspect they do not account for any supplementals we also submitted——

Senator FORD. I understand all of that, and that is the reason you got away with it. Your original request was *x*. That is what you asked for, and if you had not asked for anymore, that is what it would be. Now you are asking for a supplemental. But in your supplemental you say you are going to take it away from other areas, did you not?

Mr. BURNLEY. Yes, but not from operations.

Senator FORD. You are really cutting from other areas to put that into your controllers and your support staff. You are not asking for anymore money?

Mr. BURNLEY. We try to get the——

Senator FORD. But you are not asking for anymore money under what you requested in your supplemental?

Mr. BURNLEY. Senator, we are asking for more money for FAA operations this year in our supplemental.

Senator FORD. But you are taking it away from someplace else to get your $51.5 million?

Mr. BURNLEY. Yes, sir, other parts of the Department.

Senator FORD. Just say yes, and that is exactly what I ask you. You are taking it away from other areas?

Mr. BURNLEY. I want my answer to be accurate and complete.

Senator FORD. I want it to be accurate.

Mr. BURNLEY. The answer is from other areas of the Department we are taking it away.

Senator FORD. I understand that, but what you are doing is not asking for anymore money. You are actually taking the money away from somebody else in your overall budget. So you are taking it away from others to give it to more controllers, which was $51.5 million, was it not?

Mr. BURNLEY. Yes, sir. I do not want to leave the impression that we are taking it away from accounts where the money would be spent. We have tried to identify accounts where the spendout rates are lower than we had originally predicted. As a result, the funds——

Senator FORD. You are really taking it out of the general fund because it would basically lapse at the end of the fiscal year and go back to general fund?

Mr. BURNLEY. It might or might not lapse, depending on the account.

Senator FORD. It could.

Mr. BURNLEY. Yes, sir.

Senator FORD. So you are taking it out of the general fund, are you not?

Mr. BURNLEY. In some cases that would be correct.

Senator FORD. What about the money you are saying would not lapse, isn't that for a contract that you would continue in the event we agreed to it, and thereafter you only spend 15 percent of a 25 percent increase or allocation. Are you going to use that kind of money?

Mr. BURNLEY. We have not done that in this request, Senator, and we try not to do that on procurements and contracts.

Senator FORD. You will try not to?

Mr. BURNLEY. I said we try not to.

Senator FORD. That does not mean you will not?

Mr. BURNLEY. I hope not. If I have a vote we will not.

Senator FORD. Well, we have got to try this afternoon. We might be making a lot of progress.

Mr. Burnley, it has been interesting. I hope you have enjoyed yourself as much as I have. We will be seeing you again.

This subcommittee hearing is adjourned.

(Whereupon, at 4:15 p.m., the hearing was concluded.)

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